

# PLUCK AND LUCK

COMPLETE  
STORIES OF ADVENTURE.

Issued Weekly—By Subscription \$2.50 per year. Entered as Second Class Matter at the New York Post Office, November 7, 1898, by Frank Tousey.

No. 218.

NEW YORK, AUGUST 6, 1902.

Price 5 Cents.

## JACK WRIGHT, THE BOY INVENTOR, AND HIS UNDER-WATER IRON-CLAD; OR, THE TREASURE OF THE SANDY SEA.

By NOME.



Jack realized that they were desperate. A fearful encounter was inevitable. He had one of his pistols with him, and pulling it out he aimed at the foremost man and fired. The explosive ball struck his copper helmet and shattered it.



# These Books Tell You Everything!

## A COMPLETE SET IS A REGULAR ENCYCLOPEDIA!

Each book consists of sixty-four pages, printed on good paper, in clear type and neatly bound in an attractive, illustrated cover. Most of the books are also profusely illustrated, and all of the subjects treated upon are explained in such a simple manner that any child can thoroughly understand them. Look over the list as classified and see if you want to know anything about the subjects mentioned.

THESE BOOKS ARE FOR SALE BY ALL NEWSDEALERS OR WILL BE SENT BY MAIL TO ANY ADDRESS FROM THIS OFFICE ON RECEIPT OF PRICE, TEN CENTS EACH, OR ANY THREE BOOKS FOR TWENTY-FIVE CENTS. POSTAGE STAMPS TAKEN THE SAME AS MONEY. Address FRANK TOUSEY, Publisher, 24 Union Square, N.Y.

### SPORTING.

No. 21. HOW TO HUNT AND FISH.—The most complete hunting and fishing guide ever published. It contains full instructions about guns, hunting dogs, traps, trapping and fishing, together with descriptions of game and fish.

No. 26. HOW TO ROW, SAIL AND BUILD A BOAT.—Fully illustrated. Every boy should know how to row and sail a boat. Full instructions are given in this little book, together with instructions on swimming and riding, companion sports to boating.

No. 47. HOW TO BREAK, RIDE AND DRIVE A HORSE.—A complete treatise on the horse. Describing the most useful horses for business, the best horses for the road; also valuable recipes for diseases peculiar to the horse.

No. 48. HOW TO BUILD AND SAIL CANOES.—A handy book for boys, containing full directions for constructing canoes and the most popular manner of sailing them. Fully illustrated. By C. Stansfield Hicks.

### HYPNOTISM.

No. 81. HOW TO HYPNOTIZE.—Containing valuable and instructive information regarding the science of hypnotism. Also explaining the most approved methods which are employed by the leading hypnotists of the world. By Leo Hugo Koch, A.C.S.

### FORTUNE TELLING.

No. 1. NAPOLEON'S ORACULUM AND DREAM BOOK.—Containing the great oracle of human destiny; also the true meaning of almost any kind of dreams, together with charms, ceremonies, and curious games of cards. A complete book.

No. 23. HOW TO EXPLAIN DREAMS.—Everybody dreams, from the little child to the aged man and woman. This little book gives the explanation to all kinds of dreams, together with lucky and unlucky days, and "Napoleon's Oraculum," the book of fate.

No. 28. HOW TO TELL FORTUNES.—Everyone is desirous of knowing what his future life will bring forth, whether happiness or misery, wealth or poverty. You can tell by a glance at this little book. Buy one and be convinced. Tell your own fortune. Tell the fortune of your friends.

No. 76. HOW TO TELL FORTUNES BY THE HAND.—Containing rules for telling fortunes by the aid of the lines of the hand, or the secret of palmistry. Also the secret of telling future events by aid of moles, marks, scars, etc. Illustrated. By A. Anderson.

### ATHLETIC.

No. 6. HOW TO BECOME AN ATHLETE.—Giving full instruction for the use of dumb bells, Indian clubs, parallel bars, horizontal bars and various other methods of developing a good, healthy muscle; containing over sixty illustrations. Every boy can become strong and healthy by following the instructions contained in this little book.

No. 10. HOW TO BOX.—The art of self-defense made easy. Containing over thirty illustrations of guards, blows, and the different positions of a good boxer. Every boy should obtain one of these useful and instructive books, as it will teach you how to box without an instructor.

No. 25. HOW TO BECOME A GYMNAST.—Containing full instructions for all kinds of gymnastic sports and athletic exercises. Embracing thirty-five illustrations. By Professor W. Macdonald. A handy and useful book.

No. 34. HOW TO FENCE.—Containing full instruction for fencing and the use of the broadsword; also instruction in archery. Described with twenty-one practical illustrations, giving the best positions in fencing. A complete book.

### TRICKS WITH CARDS.

No. 51. HOW TO DO TRICKS WITH CARDS.—Containing explanations of the general principles of sleight-of-hand applicable to card tricks; of card tricks with ordinary cards, and not requiring sleight-of-hand; of tricks involving sleight-of-hand, or the use of specially prepared cards. By Professor Haffner. With illustrations.

No. 72. HOW TO DO SIXTY TRICKS WITH CARDS.—Embracing all of the latest and most deceptive card tricks, with illustrations. By A. Anderson.

No. 77. HOW TO DO FORTY TRICKS WITH CARDS.—Containing deceptive Card Tricks as performed by leading conjurers and magicians. Arranged for home amusement. Fully illustrated.

### MAGIC.

No. 2. HOW TO DO TRICKS.—The great book of magic and card tricks, containing full instruction on all the leading card tricks of the day, also the most popular magical illusions as performed by our leading magicians; every boy should obtain a copy of this book, as it will both amuse and instruct.

No. 22. HOW TO DO SECOND SIGHT.—Heller's second sight explained by his former assistant, Fred Hunt, Jr. Explaining how the secret dialogues were carried on between the magician and the boy on the stage; also giving all the codes and signals. The only authentic explanation of second sight.

No. 43. HOW TO BECOME A MAGICIAN.—Containing the grandest assortment of magical illusions ever placed before the public. Also tricks with cards, incantations, etc.

No. 68. HOW TO DO CHEMICAL TRICKS.—Containing over one hundred highly amusing and instructive tricks with chemicals. By A. Anderson. Handsomely illustrated.

No. 69. HOW TO DO SLEIGHT OF HAND.—Containing over fifty of the latest and best tricks used by magicians. Also containing the secret of second sight. Fully illustrated. By A. Anderson.

No. 70. HOW TO MAKE MAGIC TOYS.—Containing full directions for making Magic Toys and devices of many kinds. By A. Anderson. Fully illustrated.

No. 73. HOW TO DO TRICKS WITH NUMBERS.—Showing many curious tricks with figures and the magic of numbers. By A. Anderson. Fully illustrated.

No. 75. HOW TO BECOME A CONJUROR.—Containing tricks with Dominoes, Dice, Cups and Balls, Hats, etc. Embracing thirty-six illustrations. By A. Anderson.

No. 78. HOW TO DO THE BLACK ART.—Containing a complete description of the mysteries of Magic and Sleight of Hand, together with many wonderful experiments. By A. Anderson. Illustrated.

### MECHANICAL.

No. 29. HOW TO BECOME AN INVENTOR.—Every boy should know how inventions originated. This book explains them all, giving examples in electricity, hydraulics, magnetism, optics, pneumatics, mechanics, etc., etc. The most instructive book published.

No. 56. HOW TO BECOME AN ENGINEER.—Containing full instructions how to proceed in order to become a locomotive engineer; also directions for building a model locomotive; together with a full description of everything an engineer should know.

No. 57. HOW TO MAKE MUSICAL INSTRUMENTS.—Full directions how to make a Banjo, Violin, Zither, Aeolian Harp, Xylophone and other musical instruments; together with a brief description of nearly every musical instrument used in ancient or modern times. Profusely illustrated. By Algernon S. Fitzgerald, for twenty years bandmaster of the Royal Bengal Marines.

No. 59. HOW TO MAKE A MAGIC LANTERN.—Containing a description of the lantern, together with its history and invention. Also full directions for its use and for painting slides. Handsomely illustrated. By John Allen.

No. 71. HOW TO DO MECHANICAL TRICKS.—Containing complete instructions for performing over sixty Mechanical Tricks. By A. Anderson. Fully illustrated.

### LETTER WRITING.

No. 11. HOW TO WRITE LOVE-LETTERS.—A most complete little book, containing full directions for writing love-letters, and when to use them; also giving specimen letters for both young and old.

No. 12. HOW TO WRITE LETTERS TO LADIES.—Giving complete instructions for writing letters to ladies on all subjects; also letters of introduction, notes and requests.

No. 24. HOW TO WRITE LETTERS TO GENTLEMEN.—Containing full directions for writing to gentlemen on all subjects; also giving sample letters for instruction.

No. 53. HOW TO WRITE LETTERS.—A wonderful little book, telling you how to write to your sweetheart, your father, mother, sister, brother, employer; and, in fact, everybody and anybody you wish to write to. Every young man and every young lady in the land should have this book.

No. 74. HOW TO WRITE LETTERS CORRECTLY.—Containing full instructions for writing letters on almost any subject; also rules for punctuation and composition; together with specimen letters.



# PLUCK AND LUCK.

Complete Stories of Adventure.

*Issued Weekly—By Subscription \$2.50 per year. Entered as Second Class Matter at the New York, N. Y., Post Office, November 7, 1898. Entered according to Act of Congress, in the year 1902, in the office of the Librarian of Congress, Washington, D. C., by Frank Tousey, 24 Union Square, New York.*

No. 218.

NEW YORK, AUGUST 6, 1902.

Price 5 Cents.

## Jack Wright, the Boy Inventor AND HIS UNDER-WATER IRON-CLAD:

OR,

## THE TREASURE OF THE SANDY SEA.

By "NONAME."

### CHAPTER I.

#### THE YOUNG WIZARD AT WORK.

The month of November, clear and cool, had dawned upon the picturesque village of Wrightstown, one of the prettiest settlements on the Atlantic sea coast, and the bay upon which it was built was dotted with all kinds of boats.

Most of the seafaring people residing in the cottages near the shore followed the fishing industry; but the people who lived in the handsome houses further back from the shore followed other callings, and many were citizens of large means.

Perhaps the wealthiest and most esteemed resident in the village was a boy inventor by the name of Jack Wright, who lived in the handsomest dwelling for miles around on the suburbs.

His father had been a retired seafaring man, who devoted the last period of his life to inventing submarine boats, and the village had been named after him.

At the foot of Jack Wright's garden flowed a creek, which emptied into the bay, and upon the banks the boy had erected a large and well-equipped brick workshop, in the form of a cross.

In the central building the boy constructed various kinds of submarine and other boats: in the right wing he devised the most singular looking vessels for navigating the air, while the left wing was utilized for building overland contrivances, run, as most of his inventions were, by electricity, magnetism, steam, compressed air, gas, galvanism, vacuum and wing force.

At the time alluded to Jack Wright was in the central building, for he had just completed the construction of a new type of warship—an ironclad, capable not only of going over the

surface at great speed, but also of diving and navigating beneath the sea equally as well.

The advantages of a frigate of this kind are obvious enough.

The young inventor, having kept pace with the progress of modern invention, of implements of warfare, had seen what an easy matter it was for an enormous twelve-inch gun to blow any man-of-war out of the water with one well-directed shot.

A frigate capable of approaching the enemy unseen beneath the waves would not be exposed to such a shot, and could get near enough to turn the tables on its formidable adversary.

The boy had built the armored cruiser as an experiment, and to gratify his inordinate talent and love for invention, for he was very wealthy, and could well afford to expend the large sums of money necessary to evolve his strange contrivances.

Moreover, it was a singular fact that Jack Wright had never yet brought out an invention for which he had not found a use that returned him many times as much as he laid out building it.

The laboratory in which the boy was experimenting at the time to which your attention is called was a vast room above the workshop, pierced by many windows and illuminated by hundreds of electric lights.

It contained almost every known material substance, there being fifty thousand different articles there, some of which cost one thousand dollars an ounce, the machinery being in some instances so delicate that solid walls thirty feet deep were built under the marble slabs supporting them, and they were so arranged that nothing near them could affect their motion.

Hundreds of glass globes, containing various solutions, were arranged on shelves. At one side there was a blazing furnace,



beside which stood a table littered with crucibles, retorts, scales, mortars and various kinds of metals, the whole thing arranged for the reduction of iron, silver and gold.

Upon the wall were magnified photographs of the moon, stars and other things, among which was the head of an ordinary house-fly, magnified to the size of a dinner plate, hair standing out from its center in all directions like brushes two inches long.

The eyes were made up of thousands of little eyes fastened together like a honeycomb.

Upon a table were some lumps of coal, for as almost everything on earth contains electricity, Jack Wright had been trying to get it from the coal; if he accomplished this, a lump as big as his fist would heat a whole house many hours, and a basketful would run a steamship a day, revolutionizing everything.

Various kinds of instruments hung upon the walls, among which were electric gauges, under-water ship logs, galvanometers and numerous other indicators, among which was a compass-like instrument for determining where iron ore lay in the earth, the needle pointing to figures showing the character of the magnetic ore beneath it.

In back of Wrightstown there was a vast mass of iron in the ground, a mile long, a mile wide, and several miles thick, around the top of which miles of wire had been wound by the young inventor.

He had formed an induction circuit, to which he was going to have the most powerful of electric currents, and as telephones are made by running a wire around the top of a magnetic bar, when this one was charged with electricity, the boy expected to hear the explosions which are supposed to be going on continually upon the sun, by this big telephone.

The boy was a handsome fellow of less than twenty, with a strong, athletic figure, clad in plain but faultless clothing. His eyes and hair were dark, his features slightly aquiline, and while his disposition was even, he was possessed of the most indomitable courage and perseverance, and was of a most high-strung and generous nature.

Among his many inventions was a high explosive of greater force than dynamite, gun-cotton, powder or nitro-glycerine, which he had named horrorite, and he was experimenting at making explosive cannon balls, loaded with this dangerous compound, to burst when it struck the object aimed at, at the time our story begins.

It required a level head and a steady hand to toy with that awful compound, an ounce of which was ample to blow the huge workshop to pieces, and the boy was just in the act of pouring some of it into an iron shell, when there sounded a report, and something suddenly came whistling across the room, grazing his head and struck the wall beyond.

Jack was startled, but not a tremor shook him, although he knew it was a pistol shot, and that a bullet had come within an inch of killing him, nor did he remove his glance from the phial, from which the explosive was flowing into the shell, until it was emptied.

Had he given it the slightest jar the shell standing upon the table would have burst and blown him to pieces!

But as soon as the phial was emptied he glanced around, and to his astonishment he saw that although he had carefully locked the door, in order not to be intruded upon and disturbed during his dangerous work, a man stood in the room clutching a pistol in his hand.

With one glance the boy saw that the fellow was crazy.

He had on a ragged suit, an old felt hat, and wore a white beard.

It puzzled the boy to account for his presence in the laboratory, as he saw that the door leading downstairs was yet locked and bolted, but a moment afterwards he felt a draught, and

saw that a window stood open at the other end of the apartment.

There was a thick, strong vine trained up that side of the shop, and it became apparent to the boy that the madman had climbed up the vine, and thus got into the room.

His eyes were wild and excited, he was muttering incoherently, and his face was pale and wan, as if he had been greatly suffering recently.

Upon observing that the boy had seen him, he raised the pistol, aimed at Jack, and was about to fire again, when the boy saw that he was standing upon a part of the floor covered with copper sheets.

As quick as a flash, the young inventor detached an electric wire from a binding-post on the wall, and touched its uninsulated end to another post, when a powerful current was transmitted to the copper floor covering, and the madman gave a terrible yell.

He received a shock that knocked him flying across the room, and dropping the pistol he fell to the floor writhing with convulsions, foaming at the mouth, and screaming in a veritable frenzy.

Jack profoundly pitied the poor wretch, and regretted the necessity of causing him such intense suffering, for the man clearly was not accountable for his actions, yet had he not taken this method of defending himself the lunatic might have sent a ball crashing through his brain.

Hurrying over to the prostrate man, the young inventor bent over him and saw that he was not as common a personage as he at first sight appeared to be, for his face had a refined look, his hands were small, soft and white, and he used the language of an educated man.

Raving furiously, rolling and struggling, he squirmed about the floor for several moments, until the effect of the shock wore away. Then he became calmer, finally recovered, then sat up, and stared blankly around, with all trace of insanity gone!

"In Heaven's name, where am I?" he gasped, pressing his hands to his forehead.

"Have you no recollection of just now trying to murder me?" asked Jack.

"Murder you? Why, no—impossible, impossible!"

"But you just climbed up the vine outside, came in the window, and shot at me."

"It cannot be—and yet, hold! I remember—I remember!"

"What do you recollect?"

"My partner—Martin Blackburn—tried to poison me, or at least he gave me something to drink that maddened me. We lived in New York, and he invented a submarine torpedo boat. I had a secret—the secret of where a vast treasure lay buried in the Sandy Sea. We formed a partnership. He was an expert diver. We were to use his submarine boat to get the treasure. He was to give me \$50,000 for my secret, and half the profits. But he wanted all without paying. I recall that we were dining together at our hotel. After drinking my wine I became crazed. He removed me to a private insane asylum near Wrightstown. I recovered periodically, and he strove to force my secret from me. I stubbornly refused to disclose it, I remember. Then they would drug me again and craze me. I recall knocking down my keeper and escaping. Then everything became a blank till now."

He groaned and covered his face with his hands.

Jack was amazed at what the man said.

## CHAPTER II.

### THE HISTORY OF THE TREASURE.

It was evident to Jack that the man standing before him was no longer crazy, but had really been the victim of such



deliriant neurotic poisons as belladonna, stramonium, hyoscyamus or nightshade.

Every word he uttered had a sensible ring to it, and as soon as he had sufficiently recovered himself the boy said to him soothingly

"Although the subject of your remarks seems to be the flight of a fevered imagination, I have faith in what you say, Mr.—Mr.—"

"My name is William Hawkes," said the stranger.

"And mine is Jack Wright."

"What—the famous young inventor?"

"Exactly so; and you are now in my laboratory."

"By heavens, this is fate!"

"I think I can account for your madness. In India the seeds of the dhatoora alba, a plant which grows abundantly in most parts of that country, are frequently used for the purpose of hocussing travelers, in order that they may be robbed. These seeds resemble capsicum, are mixed with food or drink, and give rise to total insensibility, often with noisy delirium or delusions. Death is not infrequent after a large dose, and its effect completely alters the disposition of the individual, causing him to give way to all kinds of foolish antics and notions. I have no doubt that is what your enemy used, and the electric shock I gave you overcame its effects on your nerves and cured you."

William Hawkes nodded.

"I share your opinion," said he. "Did my pistol shot hurt you?"

"Not in the least. Were you pursued from the insane asylum?"

"I do not remember exactly, as I was under the influence of the drug at that time, and only had lucid intervals."

"You said Martin Blackburn invented a submarine torpedo boat?"

"He did. The idea was stolen from the one owned by the Government, which was lying at the Brooklyn navy yard. I have heard of your inventions, and would have opened negotiations with you to go in search of the treasure of the Sandy Sea when I disagreed with my partner had he not entrapped me, which he did to guard against my doing so, for he was aware of my plans, and didn't want you to engage in it, as he knew that you would succeed."

"But what treasure is this you allude to? I never heard of a place called the Sandy Sea," said Jack in curious tones.

"I will explain, then," replied William Hawkes. "I was a member of a geographical survey company, which was sent to view the great whirlpool called the Maelstrom, which lies to the southward of the Loffoden Islands off the coast of Norway, near a large rock in the middle of the strait, dividing the islands of Vaer and Moskenes. It is produced by the conflicting currents of one of the great Norwegian fjords. In summer, at flood or ebb tide, it offers no danger, even to small boats, but in winter, and during stormy weather, learge steamers and ships do not dare to venture too near it. At certain stages of the wind and tide the whole stream boils in mighty whirls, against which the strongest vessels contend in vain. It was believed that the whirling waters sucked ships down in their roaring vortex, but we proved that they didn't; they merely swamped the small boats and dashed the big ones on the rocks."

"I have often heard of it," said Jack. "It is said that the Maelstrom and its vicinity furnishes a favorite feeding ground for the largest and finest specimens of fish of all kinds, and I have no doubt that human bodies are what they are there after."

"Your surmise is right," replied William Hawkes gravely. "Annually many richly laden craft go down there with all hands on board. The treasure I referred to, outside of the many other treasures which must, in time gone by, have sunk

there, was that contained on board of two ships sent from St. Johns, Newfoundland, across the Atlantic for Christiania. It amounted to one and a half million dollars in American gold. The ships were Norwegian vessels sent to get it in payment for furs and fish-oil for a year, purchased by the North American Fur and Oil Co. from the Norwegian Fur Company. Caught in a storm, the two ships—Viking and Skager Rack—were swept into the Maelstrom while I was there, and were lost with all hands. This loss ruined the Norwegian Fur Company, and they failed, for no ordinary ships could recover the treasure from the Sandy Sea, and the money lays there now, the property of anyone who can get it."

"I read in the newspapers about that loss," said Jack, "but as no one knows where the ships went to pieces——"

"Ah, but I do," interposed William Hawkes eagerly. "I was on one of the cliffs of one of the Loffoden Islands at the time, and saw the vessel sink before my eyes. Here—I will draw you a diagram of the exact spot; but, of course, the tides have shifted the wrecks."

He picked up a pencil from the table, and inscribed some written directions, and drew a roughly mapped sketch of the situation, which he handed to Jack for inspection.

"You still refer to the Sandy Sea?" questioningly said the boy, as he took the paper and glanced over it carefully.

"That name is not generally familiar in this country," replied William Hawkes; "but it is well known to the people of the Loffoden Islands about which it is located."

"Does it arise from the Maelstrom?" queried Jack.

"Partly," was Hawkes' reply. "Among the most active causes of variations in the distribution of land and sea, on the globe, are the movements of the submarine soil. The rush of waters about the Maelstrom continually causes disintegration, and all the sand thus carried in suspension is deposited when the waters attain a position of rest at a great distance from the island of Vaer where the currents cease to act."

"That seems reasonable to suppose," replied Jack thoughtfully.

"Of course it is. The fact is proven already. It is the reason that ports choke up, unless a strong current of water can be made to flow through them, for the sand is deposited most rapidly when the entrance to a port follows the direction of a current parallel with the coast. The amount of sand stirred up by the gyrating waters of the Maelstrom is enormous, because the current flowing ahead isn't strong enough to carry it away from the whirling vortices, so it remains there, and being continually stirred up, forms a sandy sea."

That would have made it difficult to see through it in case you had gone down in Martin Blackburn's submarine, wouldn't it?"

"Very," admitted William Hawkes; "but a powerful electric light would have helped to pierce the intense gloom."

"And does nobody but you know the location of this treasure?"

"Not a soul!"

"But why have you confided your valuable secret to me?"

"In the first place, because you have a world-wide reputation for honor."

"Well?"

"And secondly, because I am going to ask you to go for the treasure with me in one of your celebrated submarine boats, and share with me the proceeds of the trip."

Jack gave a violent start.

"Just my luck!" he exclaimed.

"What do you mean?" quickly asked the stranger.

"As soon as I finish building a new invention something is sure to turn up to give me use for it," laughed the young inventor.

"What do you think of my proposition?" anxiously asked Hawkes.



"I think very favorably of it," replied the boy, "since I have just completed a submarine ironclad, capable of resisting the strongest currents, and armed with nine guns that are not only capable of blowing Martin Blackburn's submarine torpedo boat to pieces if he should interfere with me, but also able to devastate a whole city from a distance of ten miles out at sea."

A joyful smile overspread William Hawkes' pale face.

"Thank heaven!" he muttered delightedly. "The project about which I have planned, pondered and dreamed for a year is standing a chance to be realized at last!"

He shook hands with the young inventor in a paroxysm of intense pleasure, his eyes filling with tears.

At that moment there reached the boy's ears a babel of voices approaching, down in the yard, and with a violent start the stranger's face underwent a grave change, and he listened.

"My persecutors!" he gasped.

"What?" cried Jack.

"I recognize the voices as those of the asylum keepers."

"They have tracked you here, then?"

"So it seems. And, good Lord, there's Martin Blackburn's voice!"

"Hark! They are clamoring for admittance into the shop below!"

"Oh, Mr. Wright, don't let those scoundrels get in and drag me away to that terrible asylum again. It would kill me!" groaned William Hawkes, in an agony of intense alarm, his face becoming convulsed with fear, his eyes having a pleading look, and a cold sweat bursting out all over him.

Jack went to the window and peered out, remarking:

"Have no fear. I will protect you, my friend."

Glancing down, he saw a large crowd of rough-looking men, at whose head stood a fellow of about thirty, clad in handsome clothing.

He had a narrow, sallow face, black hair and eyes, and rather repulsive features, despite the loud, flashy elegance of his attire.

The men were pounding on the door.

"What do you want there?" demanded the boy angrily.

Martin Blackburn looked up with a scowl.

"Say, young feller," said he in bullying, slangy tones, "we want ter come in here—see? There's a loony jay escaped from the 'sylum, an' he was seen comin' in through that winder, see?"

"The man isn't crazy," replied Jack. "He is the victim of a base plot, and you not only can't have him, but you can't come in."

"Lord! So you've got the bloke, hey?" yelled Blackburn in dismay. "Well, we'll see 'f I don't get him. Bust down the door, fellers!"

The ruffians had found an ax in the yard, and one of them pounding the door with it, soon burst it open, and the whole crowd swarmed in.

### CHAPTER III.

#### TWO OLD CRONIES.

In the room beneath the one in which Jack and the stranger stood there was a cellar filled with water, which communicated by two big doors with the creek.

Floating in the water was the boy's latest invention, a most beautiful ironclad of peculiar but graceful form.

There was a platform, railed in, which ran around three sides of this spacious tank, and when the first volley of blows rained from the axe against the door, two people came across a gang-

plank from the Warrior, as the ironclad was named, to the platform, and stood listening near the door.

One of them was an old sailor with a wooden leg and a glass eye, a fringe of whiskers, and a sailor suit on, named Timothy Topstay, who was one of Jack's best friends, a fine navigator, and the most notorious liar about his own exploits in existence.

He lived at the boy's house, had been a marine in the navy with Jack's father, and had always accompanied the boy on his strange voyages.

The other individual was also a great friend of the young inventor's, who lived at the Wright mansion.

His name was Fritz Schneider.

He was a fat-bellied little Dutchman, not much older than Jack, with a round, smooth face, yellow hair, blue eyes, and of a fiery, excitable disposition.

He was a professional electrician of great talent, a bad player on the accordeon, and an excellent cook, as was attested by his successes during all of Jack's trips on which he had accompanied him.

Tim and Fritz, as they were familiarly called, had a great deal of affection for each other, and the most extreme loyalty to Jack. Both were brave, intrepid fellows, and their only failing was a wild desire they continually had to play jokes and fight each other.

They had been busy on board of the ironclad putting the fixings in order, when they were startled by the onslaught of the asylum keepers, and soon realized what was going on.

"Shiver my toplights, lad!" the old sailor exclaimed, as he took a chew of plug tobacco and gave a hitch at his pants, "but them 'ere lubbers is a-batterin' our hatches down ter storm ther hold."

"Don't you vhas hear Shack ub by der vinder alretty, dellin' dem ter stob der rackets? Shiminey Christmas! he doesn't vant dot dey come in vonct, und so helb me if I don't durn der son-of-a-sea-gooks on deir beckpones so soon as dey boke deir noses in here."

"How in thunder kin we haul 'em up in ther wind, lad?"

"I show you vonct," replied Fritz, with a diabolical grin. "Git a glub!"

He took down part of the sectional railing, and Tim brought two capstan bars from the deck of the ironclad.

Then they each took up a position on either side of the door.

Hardly had they done so when the door gave way and fell with a crash; then in swarmed the ruffians with a wild rush.

No sooner were they inside when Fritz cried:

"Soak 'em, Dim! Soak 'em!"

"Aye, aye, my hearty! Here she goes!"

Bang—bang!

Biff—bump!

Thump! Thump! Thump!

The shower of blows fell thick and fast upon the heads and bodies of the invaders, and a chorus of yells burst from their lips.

Every blow knocked a man flying, and every individual thus stricken was propelled forward with the force of a cannon ball, and knocked head over heels into the inundated cellar.

A tremendous uproar of bangs, yells and splashes arose, until the whole tough crew were sent into the water, where they swam about like drowning rats.

Jack came running down a flight of stairs in the midst of it timidly followed by William Hawkes, and taking in at a glance what his friends had done, he took a coil of wire from a binding-post on the wall, to which one end was fastened, and dropping the other end into the cellar, he turned on a current of electricity, and the water became charged with it.

The yells of the swimming horde increased as they felt the



prieking current flowing through them, and leaving his two friends to deal with the rascals, Jack ran to the door.

Within its portals stood Martin Blackburn, his dark face convulsed with a paroxysm of intense rage when he saw what had befallen his minions, for he had just escaped their fate.

He recoiled into the yard with an imprecation when Jack confronted him, and raising his cane, struck the boy a blow in the face with it.

"Take that, curse you!" he snarled. "I'm a-goin' to get even with you for this work, young feller—see?"

The blow caused a deathly pallor to overspread Jack's face.

"You hound!" he panted, as he sprang toward the man. "How dare you break into my place and then strike me?"

He dealt the rascal a stinging blow in the eye with his fist.

Blackburn swore and recoiled.

The boy followed him up, however, and struck out straight from the shoulder again and again, until the man yelled for mercy.

"I'll teach you a lesson you won't forget in a hurry," the boy exclaimed, as he guarded the blows of the other, and pummeled away at his face. "Then I'll put you in jail for your treatment of William Hawkes! Out with you now—out with you!"

"Oh, say! Stop, will you?" roared Blackburn. "Don't you see you're breakin' my mug? I ain't no Reuben. I know when I've got enough—see? Let up now, I tell you!"

Jack caught him by the back of the neck, twisted him around, and kicked him step by step across the yard to the front gate.

But here he wrenched himself free and ran away.

Upon finding that he was not pursued he came to a pause, and shaking his clenched fist at Jack, while a look of execrable hatred contorted his face, he screamed in furious tones:

"May the fiend seize you! I won't never forget them welts, I won't. We'll meet again, and when we do I'll git even with you—see?"

Jack made a motion as if to pursue him.

All his boastful air fled, and he ran away.

By the end of a minute he disappeared around a corner.

Jack was impressed by the ugly demeanor of the man, and going back toward the workshop he saw that the asylum keepers had all made their escape, and were running away into the woods on the other side of the creek, which they reached by crossing a rustic bridge spanning the stream.

He shouted to Tim and Fritz, who were pursuing, to let them go.

They joined him at the workshop, and hearing groans went in.

Poor William Hawkes lay weltering in a pool of blood on the platform.

One of the keepers had dealt him a savage blow ere departing, and knocking him against the railing gashed his head open.

He lay there unconscious, and in a few hurried words Jack explained who he was, and sent for a physician by Fritz.

In the meantime, he and Tim carried the sufferer into the house.

When the doctor arrived and examined the man, he shook his head gravely, and said that the injury was very serious.

"Do you consider it fatal?" asked the boy.

"Not necessarily. He has a compound fracture of the skull, and under proper treatment may ultimately recover; but it will be weeks—months, before he is entirely well, poor fellow."

"How unfortunate."

"My advice to you is to send him to the hospital. He will

get good care and attention there, and you won't be troubled with him."

"I shall follow your suggestion," said the boy, "and as I will pay for extra attention to him, he will be comfortable, anyway."

He rang for his coachman, ordered the victoria, and accompanied by the physician brought the sufferer away.

Hawkes was made as comfortable as possible, after which Jack left him, and repairing to police headquarters, he reported the matter, and lodged a complaint against the asylum, from which Hawkes had made his escape.

This done, he returned home, met his two friends in the cozy library of the house, and told them what transpired.

They were both amazed at what Hawkes had told Jack.

"Lor!" said Tim, when the boy finished. "Mebbe he wuz lunny arter all."

"He was as sane as we are, but a victim of foul play," retorted Jack.

"Und would yer haf gone mit him after dot sunken shibs alretty?" Fritz asked.

"Very likely I would, for I have got faith in the story. Besides, such a trip would give me use for the ironclad. I am going to try the boat to-morrow on the bay, and if she works properly this would be a grand opportunity to put her to the test."

"I tink so, neider," said Fritz, lighting his pipe.

"Thar's nuthin' as'd please me more'n pilotin' ther Warrior across ther sea," said Tim. "I'm jest achin' ter git afloat agin, blow me if I ain't!"

"Well, if Hawkes is to be laid up for months he could not go," said Jack; "so why couldn't we make an arrangement with him to let us go after the treasure, and give him a share, if we get it and live to return by the time he has recovered?"

"Dot vhas shust der blan!" eagerly assented Fritz, nodding.

"Why, lad, ha' ye made up yer mind ter go arter it?" asked Tim.

"I have," replied Jack emphatically. "I know that such a treasure was lost in the Maelstrom, and I have every confidence in the ability of my under-water ironclad to get it. Will you go?"

"Aye, aye!" eagerly said Tim.

"Und me, too!" added Fritz.

"That settles it, then—shake!"

They shook hands to seal the compact.

"Vhen ve go?" queried the young Dutchman.

"In one week from to-day," replied Jack.

"Bless me, lads, that'll give us plenty o' time ter get ther Warrior ready," said Tim; "an' then ho fer a sail an' ther sea once more!"

## CHAPTER IV.

### THE WHALEBACK.

On the following day people began to gather from the town and all parts of the adjacent country to witness Jack's exhibition of the Warrior, and as soon as our friends had their luncheon they entered the workshop.

The handsome warship lay in the square pool as buoyantly as a cork, and presented a most striking appearance.

She was about one hundred feet long, fifteen feet beam, with an oblique bow and stern, and did not present a sharp angle, as she had been rounded everywhere to prevent the least resistance while navigating under water.

There were two turrets at either side, the midship one having two pneumatic rifled guns, and the ones aft each having one, while forward there were indentations, each showing a



gun, and there was one of extraordinary size planted in the bow.

Below them were four water tubes with automatic traps for giving ingress and egress to the sea brine, pumped in or out, to sink or rise her below or above the surface.

Each garboard was furnished with a trap door to let the crew go in and out when she lay on the bottom of the sea.

She had two propellers, a small after deck, rows of dead-lights to illumine the gun deck, and above them a railed deck surrounded the cabin which was attached to a circular pilot-house.

The turret opened upon a hurricane deck, and a flight of stairs that were surmounted by a searchlight led to the forward deck below.

"It would take a pretty heavy shot to smash her thick plates," said Jack; "and she is fitted up inside with every luxury and comfort."

"She's a regular floatin' palace!" said Tim enthusiastically. "I only wish as she had a few spars an' sails to keep me occupied aloft."

"Dot vhas der strongest shib vot effer you vhas built, don'd id?" asked Fritz, observing how massively everything upon her was constructed.

"She is," replied Jack; "and her appointments surpass anything I have ever yet attempted. It's most time to start, boys."

They passed inside of the Warrior by a door on the forward deck, and found themselves on the gun deck, from which a staircase led up to the pilot-house over their heads.

A storeroom filled with diving apparatus opened on this deck, another room was reserved as a battery room for the motive and power forces, another for a pantry and galley, another for a provision storeroom. There were bathrooms, sleeping rooms, water compartments, air reservoirs, an armory, and, in fact, everything needful.

Ascending to the pilot-house, they found that it was filled with all kinds of instruments, ensigns, maps, charts, compass, wheel, and a lever board for controlling all the mechanism by electric wires.

In back of it a door led into a large and handsome cabin, and the entire boat was fitted out with electric lights.

Tim and Fritz were wild with delight over everything they saw, for up to the present moment Jack had not permitted anyone to go all through the beautiful frigate.

Glancing up at the timepiece on the wall, he observed that it was nearly time to start for the bay, so he rang a gong and one of his workmen opened the creek door.

Grasping the wheel, he turned a lever which put the electric machinery in motion, the screws revolved, and with a stately motion the beautiful craft glided out on the stream.

Tim and Fritz kept a sharp glance fixed upon the machinery until the boat reached the bay, and then joined Jack.

"Does she work all right?" he asked, anxiously.

"Like a clock," replied Tim.

"Good! As her machinery is modeled after my former success, I have no fear about them failing to operate."

A cheer from the spectators greeted the proud Warrior as she shot out on the bay, and Jack put on full speed, the noiseless machinery spinning the boat across the bay at the rate of forty miles an hour.

He did not stop her till he reached the lighthouse on the headland, and then drove her back.

As soon as Jack had shown the points off to the spectators, he called his two friends into the turret and said:

"Close everything up. I am going to try her under water. I see that my men have towed an old wreck out in the middle of the bay for us to exercise the torpedoes on, as I ordered them to do."

"An' thar's several committees ashore, sir, from different countries navies ter see how she works," said Tim. "Ther

war departments o' ther furrin nations ls allers on ther watch fer new inventions o' this kind, an' I s'pose some 'un'll make yer a bid fer yer patent if they sees as ther Warrior acts all right."

"I vish dot ve vhasn't got ter go troo all dese motions," Fritz exclaimed, as he turned away from the window out of which he was looking. "If we had blendy dime ter fool aroundt mit dis poat, so sure as nefer vhas, ve could had some beaudiful sport by oursellufs alretty mit dot big fishes ower dere."

"What do you mean by that?" asked Jack, curiously.

"Vot I mean? Vhy, didn't yer vhas seen dot whale?"

"Are yer givin' us a fish story, say?" demanded Tim.

"Nein, nein! I tort yer seen id. I yust seen a whale so big as a house schwimmin' troo der vater agross der bay, but it vented itselluf oud by der sea now, und ve don't vhas seen id again. It must haf been a cuttle-fishes' alretty."

"I thought you said it was a whale?" said Jack.

"So I t'ought me at first, but now I shange me mine mind 'cause it vhas so big as a cuttle-fishes only not de same shape vonet. It vhas got a hump on its back like a gamel."

"You must be dreaming!"

"Och, I don'd dell me some stories like Dim."

Whatever it was Fritz had seen he was evidently impressed a great deal by its peculiar appearance, but neither Tim nor Jack had seen anything of it.

"I reckerlect when I wuz aboard o' ther U. S. frigate Wabash," said Tim, "we wuz a-cruisin' in ther Injun Ocean under full sail, an' thar wuz a clear sea athwart our course. I wuz doin' my trick at ther wheel when ther lookout suddenly yells: 'Land ho! Thar's an island risin' up from ther sea dead ahead!' an' I looks up, when, sure enough, thar it wuz—"

"Land springing up from the sea?" demanded Jack.

"Aye, now, it looked like a big sewer main, an' it had a suction to it wot drawed ther frigate right inter ther openin'. Fer a minute we thought as we wuz in a big tunnel, but lookin' ahead wot should we see but ther inside o' a big belly. An' then it flashed acrost my mind as we'd sailed inter ther gapin' jaws o' ther sea sarpint, an' wuz a-sailing over its tongue, into its throat an' down its stomach. Every one gave himself up fer lost."

"And you were all swallowed up?"

"Lor' bless yer, no," said Tim. "I put my tiller hard aport, an' we sailed out o' its left gill just as it snapped its teeth tergether an' dove down, a-thinkin' it had us like Jonah inside of it."

"Tim, you can't imagine how I admire it."

"Admire wot, sir?"

"Your gall. You're the biggest liar on the sea."

"Wot, don't yer b'live me?" indignantly asked Tim.

"Frankly, I don't. Now go about your duty."

With a grumble Tim stumped away.

Upon a review of his story, however, he could not help realizing that it was a little too far fetched, so he said no more about it.

He and Fritz closed up all doors and windows, making the boat impervious to the water, and Jack started the air pumps, taking in a supply of atmosphere large enough to last them a week under water.

Only the glass windows of the pilot-house were left uncovered.

The air was compressed into reservoirs and automatically distributed through the boat for their use.

Atomizers sprayed the air with a mixture of quicklime and potash, mixed with water to neutralize the carbonic acid thrown off by the diver's breathing, and valves in the roof carried off the exhausted vitiated atmosphere automatically.

The boy started the electric lights, which sent a blaze all



over the boat, and then turned the pump lever around on the switchboard.

Down in the hold were three compartments—one amidships and one at the bow and stern.

All the air was compressed into the end compartments, and water was injected into the central chamber, its weight sinking the Warrior to any regulated depth.

Down she went two fathoms, and Jack stopped the influx. Then he started her ahead.

An old wreck had been anchored out on the bay for them to experiment upon with torpedoes, and by means of a camera obscura it was easily located by the boy.

Jack started the searchlight.

As its brilliant rays started out like a misty fan that cut through the water like a knife, a cry peeled from the boy's lips, for in the broad sheen of its light he saw on the surface an odd-looking boat.

It was shaped like a whaleback steamer without masts.

In the pilot-house window he saw the evil face of Martin Blackburn!

The boy scarcely saw it when he recalled Fritz's story about a strange fish, and realized that this boat must have been what he saw!

From the bow of the strange craft projected a gas-gun, and as the amazed young inventor stood gazing at his rival, a shot tore from this gun, flew down toward the Warrior, and crashed through the window.

The sea spurted into the pilot-house and the Warrior began to sink.

"He has avenged himself!" gasped Jack. "He located us by our searchlight!"

The next moment the boy was buried in a mass of seething water and knocked across the fast-sinking frigate's pilot-house.

## CHAPTER V.

### THE STOLEN BOAT.

The moment the crash came Tim and Fritz rushed into the pilot-house and were met by the ingushing water.

"Save yourselves!" screamed Jack. "The Warrior is sinking!"

"Donner vetter, vot's dis?" roared Fritz, utterly aghast.

"A whaleback boat shot at us from the surface!"

"Lord! It's Martin Blackburn's dirty work!" cried Tim.

The three felt a strangling sensation as the intruding water compressed the air in the boat, and it seemed as if their heads would burst.

Stentorious gasps issued from their swelling lips, the veins began to swell upon their faces, their eyes bulged out, and their faces assumed a purple, ghastly hue.

"Get out of the boat as fast as you can!" gasped Jack.

Through the rear door which the gunshot had burst, down they rushed, followed by the hissing water, and they pulled the cabin door open.

A terrible wall of water gushed in.

They clung to the hand rails running around the wall, and in a moment the room was filled and they were drowning.

The rest of the boat was closed against the ingress of the sea so the gun-deck was not flooded.

More weight was in the upper part of the boat than the lower, however, and the air chambers in the hold caused her to roll over, turn keel upward and float to a certain depth.

Before this occurred, however, Jack and his friends, holding their breath as best they could, managed to get out of the door.

Up toward the surface they shot rapidly.

Before they reached it, however, their breath gave out and they gulped in the salt water and began to smother.

Lights began to flash before their starting eyeballs like lightning, a rumbling roar thundered in their ears and all their nerves began to tingle.

Their ideas became confused.

Their senses were leaving them.

At this crisis they reached the surface and were floundering around confusedly when the men in the rowboat which towed the wreck to its anchorage saw them.

They were only a short distance off, and hastily rowing to the three half-drowned divers, hauled them out of the water.

Then the spectators on shore beheld them, and a cry went up on all sides as it became apparent that some serious accident had occurred to our friends.

In five minutes Jack and his friends recovered and told the men who picked them up what had occurred, but the whaleback fled out to sea as soon as the shot was fired, and now was invisible.

"Can you get the Warrior up?" one of them asked.

"Easily," replied Jack. "She is floating, keel upward, half way between the surface and the bottom, just beneath us, unless the currents have changed her position."

"Better git right arter 'her, Jack," advised Tim.

"Why?" asked the boy.

"That 'ere lubber wot did ther damage may come back an' scuttle her intirely."

"Sure enough. Here comes a boat from shore. You all remain here and I'll return to the workshop and bring out the Sea Spider—my first submarine boat—and in her we can go down and recover the Warrior."

The rest approved of this plan.

When the other boat drew near Jack boarded her with Fritz.

Leaving the old sailor in the rowboat to mark the spot where the Warrior lay they rowed toward the creek.

As they were going up the stream Jack glanced down into the depths of the transparent stream, and was startled to see a submarine boat go flying toward the bay.

A glance showed him that it was his former invention—the Sea Spider.

"Some one is stealing her!" he gasped, in alarm.

"Vot?" demanded Fritz.

"The Sea Spider!"

"Donner und hlitzen! Where?"

"Below us—see there!"

"Who vhas done dis?" gasped Fritz.

"Agents of Blackburn, I suppose."

"How you know dot?"

"From the fact they know how to work submarine boats."

Jack judged that as Blackburn had mastered the theory of these under-water boats, it would be an easy matter for him to work the stolen vessel, as there was but one principle of operating it.

"Vot ve do now?" blankly asked Fritz.

"The Flying Fish remains," replied Jack, referring to an air and water cutter he had invented and used some time before.

"If she ain't," said Fritz, hopefully, "der deep sea monitor must be dere, or der electric durdle."

"Give away fast, boys!" said Jack, hurriedly. "Who was left in charge of the workshop, do you know?"

"Only one man," replied one of the boatmen.

"Then something must have happened to him or those scoundrels would not have gotten away with my boats so easily."

The boat soon reached the workshop.

The water-doors stood wide open and they rowed into the cellar where Jack had kept the Warrior floating.



In this chamber lay the watchman, bound hand and foot and gagged, and the young inventor hastened to release him.

"Oh, Gee! what a time I've had!" gasped the man, arising.

"What has happened?" hastily asked Jack.

"There's been a raid made on the place."

"How did it occur?"

"Durin' your absence I was alone in here when several men entered and attacked me. I was knocked down, bound, and one of them aimed a pistol at my head, and said he'd blow my brains out if I didn't tell him where the boats were stored. Seeing that they'd murder me, I told them up in the loft. They gagged me, and getting the tackles and falls of the elevator ready, they lowered the Sea Spider and made away with her."

Above the flooded cellar was a huge elevator.

It showed signs of having been recently used.

"Did they touch any of the other boats?" asked Jack, anxiously.

"Not that I know of," replied the watchman.

Telling the rest to follow him, Jack went up to the spacious lofts and saw at a glance that only the vessel he had seen was gone, and the rest were undisturbed.

They stood upon low trucks on wheels and were easily shifted over upon the platform of the big elevator for lowering into the water.

Jack got the men to lower the turtle-shaped boat.

As soon as it floated in the cellar he and Fritz boarded her, and as the machinery was in working order they started the turtle out to the creek, the great flippers propelling her.

It looked just like a monster of the species it was modeled after, and glided along to the bay, Jack and Fritz donning two diving suits of metal, with knapsacks on the backs, containing air reservoirs that did away with the usual pumps.

Reaching the anchored rowboat Tim was taken aboard.

The principle of working the turtle was the same as the Warrior.

As soon as everything was in readiness Jack started a searchlight upon her, and she was submerged.

Down into the depths of the bay she went, and the search for the sunken Warrior began with a vim, Tim managing the turtle with consummate skill, and Jack and Fritz standing upon her railed deck, armed with ropes, grapnels, etc.

Half an hour passed by without their finding any traces of the overturned frigate, and they finally drew near the entrance to the sea, when the wrecked ironclad hove in sight.

There was a towing hawser made fast to her and Martin Blackburn's craft, on the surface, was dragging it away toward the sea.

He had evidently sent a diver down to fasten the hawser to her.

Up to the Warrior dashed the turtle, and upon reaching her Tim drove her between the stranger's line and his prize.

With one gash of his knife Jack severed the hawser, and the stranger went on without his prize.

The boy instantly secured a line between his own boat and the Warrior, and Tim started the turtle back for the shop.

Unconscious of having lost his prize, Blackburn went on and disappeared in the gloom.

It made Jack wild to know his enemies had apparently gotten away with one of his best boats, but he had no means of wresting it from Blackburn with the turtle.

He consoled himself with having saved the Warrior.

Back to the creek the frigate was towed, and upon reaching the workshop she was dragged in and the doors were fastened.

The turtle was stored away again and the three friends boarded the Warrior, pumped the water out of her, got her afloat, and soon ascertained the extent of the damage.

It would be easy to repair her, and Jack swore that when

she was fit for service he would start her off in search of his stolen boat, and either recover it or blow it to pieces, with the craft of Martin Blackburn.

## CHAPTER VI.

### A CUNNING SCHEME.

On the following day Jack and his friends set to work upon the under-water ironclad and repaired the damage upon her.

By nightfall everything was completed, and after supper the three friends repaired to Jack's library, and the boy said:

"The Warrior is in as fit condition now as she ever will be. She had but few defects, and they were very easily repaired."

"But whar are we ter look fer ther Spitfire?" asked Tim.

"What do you mean by the Spitfire?"

"Oh! I fergot ter tell ye as that's ther name I seed on Blackburn's craft."

"Is it? Well, I don't know exactly where he will head for," the boy replied, in perplexed tones. "But I feel confident that we will meet him, and when we do I'll give him a hard tussle for the supremacy and get my boat away from him."

"Say, dot son-of-a-sea-gooks may dry to sell dot poat to some nafy," said Fritz, suddenly. "Den ve nefer got it back."

"He can't!" emphatically replied Jack. "Last night I cabled to every nation that has a navy to beware of negotiating with him for my stolen boat, so his scheme is blocked in that direction."

"Vot he could do mit it, den?"

"Nothing, as far as raising money goes."

"Och, den ve got it back fer sure, alretty."

"Ha' ye seen William Hawkes?" asked Tim.

"Early this morning," the boy replied, "and he is much improved. I broached the subject to him of our going after the treasure of the Maelstrom, offering to give him an equal share, and he was only too glad to give me his assent to the plan. He handed me this map, too, and by its aid we can easily find the place where the ships were sunk and secure the treasure from them."

He drew a diagram from his pocket and spread it out on the table so that his friends could see it.

The location of the Loffoden Islands was plainly marked upon it in marginal notes, which would guide the boy, and as they all bent over it a dark shadow appeared upon the window panes.

A man stood crouching out upon the veranda peering in at them with a tigerish expression upon his face.

With an instinctive feeling that he was being watched, that is common to all people of a nervous organization, Jack suddenly glanced up and met the baleful glare of the stranger.

"Blackburn!" he exclaimed.

Both of his friends were startled.

"Whar?" growled Tim, savagely.

"On the piazza!"

"Ach, himmel! let me get at him!" hissed Fritz.

The three bounded to their feet, when, upon observing that he was seen, the rascal turned, vaulted over the piazza railing and fled.

Jack and his friends rushed to the window and flung it open.

Out of doors it was intensely dark and forbidding.

"Gone!" gasped the chagrined boy.

"Und he see an' hear all ve say!" growled Fritz.

"Then ther lubber ain't at sea wi' his craft!"

This was a revelation.



Blackburn must be yet lurking about the vicinity of Wrightstown with the stolen vessel, and it would therefore not be so hard to find him.

"There's no use pursuing him in this gloom," said Jack, returning to the room and closing the window. "He can easily escape."

"But wot in thunder are ther swab a-hangin' aroun' here fer now?"

"That's a mystery to me," reluctantly confessed Jack.

"I vhas shust tought me of someding," said Fritz.

"What is it?"

"I vhas nodices dot vhen Plackpurn vhas himself on der vater mit his poat, dem ratskals don't been able to go under vater, because dey don't vhas got der same kind of difing boat like us alretty, und ain'd got some vay like us ter leaf deir boat under vater."

"That will be an advantage to us if we meet them on the sea," said Jack, thoughtfully, "but they are armed with a dangerous gas-gun, and will prove to be formidable antagonists if they can reach a tender spot on the Warrior, as they did to-day."

"Yah; but vot can dey do mit der stolen poat?"

"She don't carry guns, it is true," said Jack, "but she could be used in various ways against us if it came to a fight."

He picked up Hawkes' diagram from the table.

Jack always kept a record of important papers.

Opening a copy-book, he took a press duplicate of the diagram.

"I think we'd better start to-morrow," he said, "and see if we can't run across Blackburn's boat. What do you say?"

"Dot shust suits me," said Fritz, who was ever ready for a fight.

"Aye, lad, but how about our ship stores?" asked Tim, doubtfully.

"I've ordered everything, and they'll be here to-night. By the time we get up in the morning the men will have everything stored away on board of the Warrior."

"Count me in, then, lad," replied Tim, readily enough.

As they had to pack their trunks, Fritz and the old sailor left the room, and Jack remained in the library.

A few minutes afterward he heard strange voices out in the yard engaged in a violent altercation.

"Confound you, sir!" cried one of the angry speakers, "what are you pouncing upon a fellow out of the bushes that way for? I tell you, sir, I won't have it. You nearly startled me into a fit."

"Shut up!" replied the other voice.

"'Pon my word, sir, you are the most impolite loafer I ever met."

"If you say another word I'll smash you in the jaw!"

"Mercy! What have I done to deserve this rough treatment?"

"You mind your business and do as I say."

"I won't!" was the defiant reply.

"Then I'll kick you all around the yard!"

There came the sound of a shower of blows, the agonized yells of a man and a volley of blasphemy.

Something in the tones of the persecuted man aroused Jack's interest, for the voice was very familiar to him.

He opened the window again, stepped out on the piazza, descended the steps, and, passing around an angle of the house, he saw two men struggling on the grass plot.

One moment after he left the room another man glided out of the shrubbery and darted upon the piazza and into the library.

He was Martin Blackburn!

Upon the table lay William Hawkes' diagram of the location of the treasure, and he eagerly pounced upon it.

When at the window before he learned what the paper was.

Glancing over it to assure himself of its contents he was about to leave the room when Tim opened the door and entered.

"Blow me!" gasped the old sailor in startled tones.

He saw, with his solitary eyes, what the rascal was doing.

"Caught!" muttered Blackburn, in desperate tones.

He jammed the paper in his pocket.

"Haul to thar!" roared Tim.

"Go to the deuce!" was the defiant reply.

The old sailor made a dash for the thief and Blackburn sprang through the window and made off with extraordinary speed.

"Lord save us, he's got the secret now!" groaned Tim. "Where's Jack?"

The boy was in the garden at that moment, running toward the struggling men to learn the cause of the row.

Upon seeing him coming one of the men broke away and ran off as fast as he could go.

He made his escape.

Jack reached the other man and recognized him as an old friend, who had frequently gone with him on his strange voyages.

"Bless me, if it isn't Peleg Hopkins!" he exclaimed.

"Jack, dear boy, how do you do?" replied the other, shaking hands and panting from exertion.

"In heaven's name, what's the matter?" queried Jack.

"Matter!" panted the old fellow. "A footpad, my Christian friend. He'd have killed me if you hadn't just arrived, 'pon my word!"

"Did you just arrive from New York?"

"No. Came to-day. Saw the stranger fire down in the water at your boat, and I realized at once what happened. Then I got some citizens to go to your shop with me, and as the watchman wouldn't let me take a boat we tackled him and stole one."

"What! Was it you?"

"Aye, dear boy; I wanted to go to your rescue. I saw you follow in the Turtle, so I pursued the whaleback; but its owner gave me the slip. Then I brought the Spider back and was going into the house when this occurred."

Jack was amazed at this revelation.

His friend was an antiquarian, a great traveler, and a member of various scientific societies.

The boy gave him the particulars and they proceeded to the side piazza where they met Tim, who was in a great state of excitement.

"Jack—ho! Jack—ho!" he roared.

"Yes—here I am—what do you want?" asked the boy.

"Blackburn wuz jist in ther library an' hooked that 'ere diagram!"

"Heavens! A plot! Professor, your assailant was Blackburn's accomplice, sure."

"How do you mean, dear boy?" blankly asked the professor.

Jack detailed the story of the treasure and Blackburn's rascality.

"I see through his plan now," said the boy, in conclusion. "He must have come here with an accomplice, saw us with the diagram, heard our talk, and when I was alone got his friend to raise a row with you to bring me out in the yard so he could sneak in and steal the paper. And now it will be a race between us to see who will get the treasure first!"

## CHAPTER VII.

### A GUNSHOT.

Jack had the press copy of the diagram to fall back on, so he was not alarmed at not finding the treasure, but he felt chagrined over his enemy learning all about it.



Armed with the stolen paper Blackburn might now start off in quest of the treasure, and secure it before the frigate got to the spot.

In an effort to frustrate this Jack sent Fritz to institute a hunt for him, aided by the police, while Tim was dispatched to search the shore for the Spitfire, or head the thief off while escaping.

The boy superintended the preparation of the ironclad's stores that night when they came, assisted by Peleg Hopkins.

When morning dawned the sailor and Dutch boy returned, and meeting Jack and the professor aboard the Warrior, Tim said:

"Blackburn has got away, Jack."

"Escaped? How?" asked the boy.

"Fritz chased ther lubber down ter ther bay, nigh the lighthouse. I wuz tackin' along shore under reefed top sails, an' saw ther wuz a small boat drawn upon ther strand when they hove in sight, boarded the boat, and it wuz pulled out ter ther Spitfire, wot wuz anchored off shore."

"Then they are gone?"

"Aye, aye!"

"That settles it, then. We must race them across the Atlantic."

"Is ther Warrior ready?"

"Yes—even Whiskers and Bismarck are aboard of her."

"Then heave away, my hearty, an' good luck to us!"

Half an hour afterward the Warrior, now thoroughly equipped and repaired, left the shop, went down the creek, across the bay and shot out on the sea, just as the sun arose.

It was a murky day.

The old sailor had the wheel, and a choppy sea was on, while a strong gale swept over the ocean.

Jack brought Hopkins around the Warrior, and showed him all her machinery and appointments.

"She is a wonder of the Nineteenth Century, dear boy—a regular marvel!" said Hopkins, enthusiastically, as they paused on the gun-deck. "I see you have got the gun-ports fitted with rubber discs, through which the pneumatic weapons protrude, to keep out the water."

"Her great collective horse power is eighteen thousand, working the screw-shaft," said Jack. "My electric force is equal to an engine of the vertical, inverted, direct acting, triple expansion type, with three cylinders of seventy inches diameter, and a forty-two inch stroke. No return fire tubular boilers are needed here to occupy valuable room, for the force I employ equals a steam pressure of one hundred and sixty pounds to the square inch."

"How long can she keep the sea without replenishing your batteries?"

"About fifteen thousand miles."

"Her armor is powerful, I see."

"On the broadsides she is protected by a belt of armor, and another of water. She is covered by two courses of plating, three inches thick amidships, and two inches forward and aft. The slopes amidships are covered with an additional thickness of three inches, and the entire space between this and the skin of the Warrior is filled in with cellulose to keep the water out. Just look at those guns, sir."

"They are mounted on strong barbettes," commented Hopkins.

"Ten inches thick," replied the boy. "and the conical revolving shields on the guns are seven inches. They are also protected by partial barbettes two inches thick. The ones up forward are rapid fire guns, and their armored sponsors are protected by shields and one inch splinter bulkheads."

"How about your electric lighting plant, dear boy?"

"It has a capacity of ten thousand amperes, and includes

six hundred incandescent lights, while it also controls the fifty-inch searchlight on the hurricane deck."

Returning to the pilot-house they found Fritz standing out upon the circular hurricane deck with a binocular in his hand, with which he was carefully sweeping the horizon.

Not a sail was in sight.

Leaving the professor in the pilot-house with Tim, the young inventor went back to the electrical room to examine the engine and motor, wires and machinery.

"Wonderful lad, that 'ere," said Tim, referring to Jack.

"The smartest boy I ever heard of," replied Hopkins, earnestly.

"Ye don't know all he's done," said Tim, expanding, confidentially.

"No," replied Hopkins, casting a suspicious look at the old sailor.

"If yer promise not ter repeat, I'll tell ye all he's inwented," said Tim.

"I won't say a word," said Hopkins.

"He's inwented an aerial train ter travel 635 miles an hour."

"Lord!" gasped Hopkins, in astonishment.

"Planned a transatlantic tubular sarvice, wot'll kerry a passenger from Wrightstown ter Liverpool in 293 minutes, blowed by pneumatic force."

"Impossible!"

"Never hear o' ther telephote? Waal, he made it, bless his eyes, an' with it yer hear an' see people wot's in different countries, in yer own room."

"By Jove!"

"He's just finished a sunograph. It's got accumulators fer condensin' an' radiatin' ther sun's rays, so's people kin do without stoves, gas an' sich like."

"That beats everything!"

"Then thar's ther moonophone he's workin' on now, an' it's a-goin' ter give ther latest political news from Jupiter, Mars an' Wenus."

"Ain't you fooling, my Christian friend?"

"Lor' no!" chuckled Tim. "Yer'd oughter see his patent double-back-action mechanical serwantphone, wot runs by springs. All yer've got ter do is ter step into a room whar it's anchored, ter be washed, shaved, dressed an' brushed in fifty-four seconds, by pressin' a button."

"Tim—it's beginning to dawn upon me that——"

"An' the mummyolite!" interposed Tim, now fired right up to his work. "That's ther best o' all. Reckon yer never heard o' him freezin' a man in it an' keepin' him alive 1,000 years? He's a-goin' ter give a guarantee wi' every one as tries it. Kin live as long as yer likes that way. All's yer've got ter do is ter git thawed out an' thar yer are, as young an' well as ever, 1,000 years hence, as——"

"Oh, what a lie!" exclaimed Jack, entering just then.

A look of consternation overspread Tim's face.

"I thought so!" ejaculated the professor, in disgusted tones.

"I wuz only a-foolin'," said Tim, trying to get out of it gracefully.

Fortunately his embarrassment was relieved a moment afterward by Fritz, who had now discovered an object on the sea, and cried:

"Someding, ho! Someding, ho!"

"What do you mean?" queried Jack, going out on the hurricane deck.

"Off on der sout'-vest by der vater. It looks like a beer kag."

Jack scrutinized it with a glass and saw that it was a boat.

"By thunder, it looks like the Spitfire!" he exclaimed.

Every one was startled at hearing this, and eagerly scanned it.

The object was oblong and floated upon the surface, going



along with the equal rapidity of the Warrior, about a league distant.

Jack descended to the forward deck and hastened to the breech of the big gun mounted in the bow.

It consisted of a barrel, two-thirds encased in a metal jacket, and by each discharge water was automatically injected into the jacket to prevent the barrel becoming overheated, as it was a rapid-fire piece.

The operating mechanism of the gun, which consisted of a main-spring and tumbler, a firing-pin and lever, was enclosed in a steel case.

When the gun was fired the recoil put the lever in action, when all the mechanism was in motion, the air explosion propelling the projectile, a new one was inserted automatically and a certain quantity of water admitted in the jacket.

The recoil was but one-eighth of an inch, yet 700 shots a minute could be fired, making an average of eleven and two-third shots a second.

A graduated quadrant permitted it to swing in any direction and regulated the rapidity of firing, which was done by a crank. a steel armor plate protected the operator, and the principal of a certain twist in rifling the barrel gave certain accuracy.

The boy aimed the already loaded gun at the Spitfire.

"Look out, he is running away!" cried Tim.

His warning came too late.

Jack turned the crank and there came a thud.

The projectile shot out.

Away it shot over the water with a demoniacal shriek, but the whaleback boat had veered off on the port tack, and the projectile missed her.

Striking the water it burst with a report like thunder, ripped the water up like a fountain, and then vanished.

"A bad shot!" said Jack, in disgust.

"Should you vhas hit him," said Fritz, "notings would a-been left."

The whaleback rapidly receded, and the Warrior dashed ahead, every one so intent upon watching for her that they did not observe two more similar boats of extraordinary speed coming on in pursuit, and gaining.

"If that was Blackburn's boat he was too quick for me," said Jack.

"An' I reckon as we ain't seed ther larst o' him, neither!" added Tim.

"They certainly are wonderfully fast boats," commented the boy.

Just then a roaring and gurgling sound was heard coming from below, and the young inventor held up his hand.

"What's that?" he muttered.

"Soun's ter me like water a-rushin' in!" answered Tim.

"Here, take the wheel till I go down in the hold and see."

The boy left the pilot-house and descended into the central water chamber by means of the trap-doors.

He turned on an electric light, and, glancing around, saw that one of the lower plates near the garboard had in some manner been strained so that the rivets became unfastened, and the water was gushing in through the opening.

There was no way to repair it save by driving new rivets in from the outside of the hull.

Jack hastened back to the pilot-house and explained what had happened in a few words.

"Unless I repair it at once," said he, in conclusion, "the Warrior will fill up and sink. Tim, go down into the hold and knock the broken rivets out of the holes, and I will go out and put new ones in, which you can clinch on the inside."

## CHAPTER VIII.

### A HUNCHBACK OF THE SEA.

Jack felt a chill pass over him when he realized that if the crevice could not be closed up the Warrior might be crippled.

In that case his enemies' boats might reach the Loffoden Islands ahead of him and thwart his project.

The very idea of it made him desperate.

"It won't do to let our enemies see that we are in any kind of trouble," he remarked. "Let us descend out of their sight and repair the damage."

"Can yer fix it, lad?" anxiously queried Tim.

"If the plate is not warped I can."

"An' if it is?"

"Then I can do nothing but run her ashore for repairs."

"Lordy! I hopes as it ain't as bad's that!"

"We'll soon see. Send her below, Tim."

Everything was closed up and the old sailor sent the iron-clad below the surface a couple of fathoms, and turning on the electric lights, the water was illumined for a long distance around.

Myriads of fishes were swimming around her, and a dull gloom prevailed with the most intense silence.

"Don't yer t'ink dot I vhas petter gone oudt und helb you?" asked Fritz. "Four hants vhas petter as vun, alretty."

"By all means—I need your assistance," replied Jack.

They thereupon went down to the apparatus room on the gun-deck where the diving suits and tools were kept.

In this square apartment hung diving suits of metal, lined with thick rubber, with air reservoirs upon the backs over which were fastened small but powerful electric batteries by which small lamps on top of the helmets could be illuminated.

These suits were capable of resisting a very great pressure.

They each donned one, and as the reservoirs were filled with compressed air, which was fed automatically into the helmets, and valves at the top let off the air that was used up, they could breathe as easily as if they did not have them on.

In the belts they thrust weapons such as knives, the blades of which sprang mechanically from the handles by touching a button, revolvers of the pneumatic type, discharging bullets that burst like torpedoes when they struck the object aimed at, and electric carbons for spurting jets of living flames from the batteries.

Having taken some tools and a long wire ladder with hooks at both ends, they stepped into a water-tight compartment and opened a valve which let the sea water flow in till it was filled up.

Jack then opened a door leading out on deck, and they passed out into the sea and closed the door again.

Their suits were furnished with telephonic arrangements, also worked by the batteries, called audiphones, by which they could freely converse with each other a short distance apart, for water, being an extraordinary conductor of sound, answered the purpose of communicating wires between them.

The front of the pilot-house was also furnished with one of these arrangements, by means of which those on the outside could converse with any one within the turret.

Having gained the forward deck Jack fastened the hooks of the wire ladder upon the top of the railing, dropped the other end down against the hull of the Warrior, and descended.

Turning a thumbscrew on his diving suit he started a jet of flame from his helmet lantern, and flashed the rays all around in search of the leak.

At first he saw nothing.

Then he descended until he was below the boat's keel.



He then observed an opening near the keel, further astern. In order to reach it he had to come up again and move the ladder along.

"Have you got the cup-suckers?" he asked Fritz.

His voice seemed dull and smothered, but was easily understood.

"Yah!" replied the Dutch boy. "Here dey vhas."

He had a leather bag slung over his shoulders, in which he had put such tools as they would require.

Withdrawing the suckers he handed them to Jack.

He then gave the boy the tool-bag.

Jack descended the ladder again, but the further down he went the further away from the keel he would have gone, on account of the slope of the hull, had he not fastened the suckers against the plates and hauled himself toward the garboards.

The cups worked like the leather discs used by boys in lifting weights by strings, only these were much stronger.

They clung tenaciously to the hull of the Warrior, and Jack presently reached the open seam and closely examined it.

He saw that two of the rivets had flaws in them, and the heads had broken off when the seam had opened.

Jack saw that Tim on the inside had knocked the old bolts out, so he now drove new ones in, and the old sailor pounding on the inside clenched them in their places.

Had he not attended to the leak at once the weight of the mass of water pumped into the hull to sink her, would, when resisted by the air, have pressed the plate out further and made it twice as hard to repair the defect.

Within a few moments the opening was closed.

The Warrior did not leak a drop now.

Jack replaced the tools in the bag, tied it to the ladder, and was about to ascend when he saw a huge fish emanate from the dusky gloom beyond, and after a momentary survey of him it suddenly shot ahead like a cannon-ball straight toward him.

It must have weighed about twenty pounds, and was as ugly-looking a lump-fish as any of these hunchbacks of the sea, but it was extremely beautiful in its color and markings.

There were scattered tubercles running posteriorly from its eyes, burning and glowing with rich colors, and by its concave, ventral disc it had the power of attaching itself to Jack's armor with the tenacity of a vise.

Lump fishes thus vary their experience by attaching themselves to rocks, floating timbers, or sticking to the bodies of larger fishes and traveling "dead-head."

The shock of its contact with Jack's body knocked the suckers loose from the plates of the Warrior, when the ladder swung out suddenly, and the boy lost his balance and felt himself falling from it.

Every ounce additional weight under water is to a diver equal to ten pounds on the surface for sinking capacity, and as the lump fish stuck to him its twenty pounds of weight was greatly felt.

Out swung the ladder and over went Jack.

He realized in an instant that he was falling, and made an effort to abandon his weights in order to let his inflated air reservoir lift him up to the surface.

His feet slipped from the ladder and down he plunged.

A groan escaped him for he knew that they must be in a very deep part of the Atlantic, in the depths of which he would perish, if he were to sink to the bottom.

The reason of this was obvious.

At a depth of thirty-two feet he would find a pressure of fifteen pounds to the square inch pressing all over him, and every thirty-two feet further down, fifteen additional, so that if he were to descend to a depth where the suit he wore could no longer withstand the pressure, he would be crushed to death!

His body sunk like a shot.

Poor Jack gave himself up for lost.

"This is the end of me!" he thought.

But just then his downward flight was suddenly checked, for he got his weights off, and the air-filled knapsack carried him surfaceward.

When he reached the surface he was beside the Spitfire.

The boy could not have been more amazed at finding this boat hovering above him than if he were actually killed, for he did not know she had been pursuing his boat with the other whaleback.

Fritz had not witnessed his fall, and the Warrior went ahead.

The lump fish was now knocked from his armor.

A man ran out on deck and caught him with a boat-hook.

Jack was hauled on the Spitfire's deck, and, soon recovering from the shock of his fall, he saw Blackburn glaring out of the glass window of his pilot-house.

There was no way for Jack to get in the Spitfire.

But Blackburn was equal to the occasion.

He opened a door in the deck, emerged with several of his men, and approached the boy.

"Stand back!" exclaimed Jack, arising to his feet.

"You are my prisoner now, young feller—see!" exclaimed Blackburn.

"Not till you render me defenseless!" retorted Jack, drawing a pistol.

"Ah! say, come off your perch! You're in my hands, dead sure!"

"Not exactly yet," replied Jack.

"Can't you see what a stuff you'd be to kick against it?"

"Not at all."

"Well, yer would, on the dead level. You hear what I say. If you get your back up I'll chuck you overboard—see!" Jack saw.

He certainly was at this man's mercy now.

"I had better surrender, after all," he remarked.

## CHAPTER IX.

### A PRISONER.

Jack preceded his captors into the Spitfire by descending a ladder, and found himself in a room of metal plates from which several doors opened into various compartments, fore and aft.

The place was swarming with men to the number of half a dozen.

A quick glance around showed Jack that the Spitfire was built with a pilot-house, the central chamber he was in was used as a sleeping, cooking and dining-room, while abaft of it was a large compartment containing a steam engine.

There were doubtless several compartments below for store-rooms, coal bunkers and machinery for propulsion, and he now saw that the Spitfire was armed with a torpedo pole on the outside, by which explosives were planted without the men going outside.

She had a searchlight, a gasgun, and several divers' suits and air pumps, hose, weights and diving utensils were scattered about, while a small electric plant gave them light.

The crew of the Spitfire surrounded him.

"Take off that metal suit!" exclaimed Blackburn.

"Not much!" replied Jack. "Did you ever hear of Achilles?"

"What in blazes has he got to do with you?"

"I'll tell you how I resemble him. The sea goddess, Thetis, dipped him in the river Styx, rendering him invulnerable, except in the right heel, by which she held him. During the siege of Troy the god, Paris, by the aid of Phœbus-Apollo



aimed a well-directed dart at the hero, which pierced his heel and killed him. In this suit of mail, my body is invulnerable—if I take it off you can easily kill me to prevent me getting the treasure you are trying to get.”

“Do you want us to hack it to pieces from your body with axes?”

“No. What’s the use of you getting violent. Under your traps I am not able to escape. Now, what is the good of denying me the privilege of my freedom, if you don’t intend to kill me.”

“How do you know I don’t?” growled Blackburn.

“Because if you did you wouldn’t have taken me aboard,” coolly replied Jack. “Don’t you intend to keep me as a hostage?”

“You’re a pretty fly cuss, you are.”

“Oh, it’s easy to see through your plans.”

“Well, we ain’t a-goin’ to have you layin’ around loose to tackle any of us when we ain’t lookin’, so we’ll tie you up.”

Jack did not like this plan.

He sized up the seven men, but saw that single-handed he was no match for them, and came to the conclusion to submit.

“I might get away with several, but in the end they would be sure to overpower me,” he muttered, “and then they’ll lay me out to get even, as they are a spiteful gang.”

Two of the men procured a rope and tied him to a ring-bolt in the bulkhead near the staircase, leading to the deck.

Then they all retired, some going aft to attend to the machinery, and some entering the pilot-house forward to resume control of the wheel and start the boat.

They left the intervening door open and Jack peered through and saw the two other whalebacks gliding through the water near the Spitfire, each of them manned by a crew of a dozen.

They soon afterward closed the door to shut out the sound of what they were saying to each other, and the boy was left in gloom.

He heard the murmur of their voices.

Then a bell tinkled back in the machine-room.

Immediately afterward the machinery was put in motion by the engineer, and began to pound, throb and shake the boat.

They were forging ahead fast now.

Several hours passed by of intense gloom, and the silence was only broken by the working of the machinery.

“What do my friends imagine has become of me?” thought the boy, blankly. “Will they remain where I fell, searching for me? Will they return, imagining I was drowned, or will they go ahead and seek for the treasure of the whirlpool?”

There was no solving this problem just then.

The rapidity of the machinery of the Spitfire told the boy plainly enough that she was plunging ahead at full speed.

No one came near him till nightfall.

Then the crew entered in couples and hastily partaking of a meal which one of them cooked, they retired again.

Hour after hour passed by and no one turned in.

Jack was amazed and he muttered:

“There must be something the matter to keep them at their posts.”

The ropes that bound his wrists to the ring-bolt were tied tight, but he began to pull at them with his fingers and in the course of an hour loosened the knots.

To slip the bindings off was then but the work of a moment, and he found himself at liberty to move about.

Just then Blackburn opened the door of the pilot-house, came in, and, closing the door again, turned on an incandescent light.

“Curse them!” he growled, dropping wearily into a chair, “they hang on like bloodhounds, an’ must know we’ve got the boy.”

“What’s the matter—are you being pursued?” asked Jack, never moving from where he had been bound.

“Yes, we are—see?” snarled the man, who was tired and ugly.

“It’s funny my boat can’t overhaul you.”

“No, it ain’t. These whalebacks are built for great speed, but blast the luck she keeps pace with us.”

“So you think my friends know I’m aboard of your craft?”

“Sure of it. That’s why they’ve been a-chasin’ us so long, see?”

“There couldn’t be better luck for me,” said Jack, with a laugh.

“Say, don’t you get me mad, young feller! I ain’t a-goin’ to let a jay like you git the laugh on me, I ain’t, see?”

He scowled at the boy in an ugly fashion, and jumped up, shaking his clenched fist in Jack’s face threateningly.

“They’ll catch you yet,” said Jack, coolly.

“Shut up! That riles me.”

“No, I won’t!”

“Then I’ll make you!”

Blackburn sprang at the boy like a maddened beast, when, to his amazement, he suddenly observed that Jack was free and came to a pause; he was recoiling when the young inventor dealt him a blow on the jugular vein that knocked him out.

Striking his head on the floor he lost his senses.

Jack glanced down at him and saw that he was stunned.

“He won’t be able to do anything for some time now!” he muttered. “By Jove! I’ll try to make my escape!”

He hastened up the staircase to the trap-door, but upon trying to push it open he found it was locked.

A careful search showed the boy how it was fastened, and opening the trap he found that the Spitfire was far ahead of the Warrior.

She had been doubling and twisting on her course in an effort to shake off her pursuer, all to no purpose, but now resorted to flight.

The boy hastened out on deck and glanced around.

It was a dark night.

A league away, astern, he saw the Warrior coming on, pell-mell, in pursuit, surrounded by a halo of electric lights, her powerful searchlight streaking out a mile ahead, sweeping the water in all directions in quest of the fugitive.

The two other whalebacks were fleetier vessels than the Spitfire and were going on ahead, just barely perceptible in the gloom.

Jack saw that he had a good chance to escape now, and shutting down the Spitfire’s trap he leaped overboard in the wake of the whaleback boat.

Away she shot, leaving the boy far astern.

Without his weights the knapsack floated him like a life-preserver and he began to strike out for his boat.

“If they fail to see me I’m doomed!” the boy thought.

His only salvation was to start the electric light on his helmet or try to get in the sheen of the Warrior’s searchlight.

He tried to do the former.

But the wire was broken that ran between the battery and helmet, and the lamp failed to work.

Swallowed up in the surrounding gloom he might be passed by unseen by his friends, so he headed for the searchlight.

The fugitive boats disappeared in the gloom ahead.

On came the Warrior as steadily as the wind.

Jack was bounced up and down by the waves, but could not sink if he tried, and still headed for the searchlight.

But a few moments before he reached a spot where it would have shown him plainly to his friends, it went out!

Intense gloom covered the rolling sea.

Jack’s heart sank like lead.

“That settles it!” he groaned, in despair.

He watched in vain for the light to reappear, and by and



by his voice rang out over the sea in the wild, appealing cry of:

"Help! Help! Help!"

## CHAPTER X.

### THE SLAVER.

No reply came back to Jack's shout, and he looked around in a vain effort to pierce the gloom, and wondered why the searchlight on the Warrior had been extinguished so suddenly.

All around him the dark waves were tumbling and tossing, and he was buffeted around like a cork for some time.

A strange sound met his ears presently—a rustling and churning of the waves, and then a dark, shadowy figure began to loom up.

It was a vessel and it came straight toward him.

"Ship ahoy! Ship ahoy!" he cried at the top of his voice.

A flood of light suddenly streamed out all around the vessel. He saw that it was the Warrior.

At the same moment Fritz, who stood on deck, discovered him.

"It vhas Shack!" he roared, boisterously. "Haul to, Dim!"

"Aye, aye! Whar is ther lad?" came the old sailor's voice.

The ironclad came to a pause near where Jack was floating, and the boy rapidly swam alongside to where the wire ladder yet hung, and mounting it he reached the deck in safety.

"Hello!" he cried. "All right, boys, here I am!"

"'Pon my word, he's as safe and sound as a gold dollar!" shouted Hopkins, rushing down the steps from the hurricane deck and shaking hands.

"Vhere der doost yer vhas been alretty?" cried Fritz.

"Just escaped from the Spitfire," replied Jack, going up to the pilot-house.

"Aye, we seen her, after arisin' ter ther surface, pick you up," said Tim, "an' we tharfor' knowed as ye were safely berthed aboard o' her. That's why we've been a-tackin' arter her so long. But ther Warrior's gone lame."

"I know why. Her batteries need cleaning. Examine them, Fritz," said Jack.

As soon as it was attended to she ran better.

Jack explained to his friends what had occurred to him, and gave them a description of the Spitfire.

In comparing her to their own resources they did not betray much fear of her, and openly expressed their contempt of the boat.

"Either one o' the boats might beat her across ther sea," said Tim; "but as they've got ter keep along wi' ther Spitfire, why, ther Warrior, bein' faster'n hur, is bound ter git thar fust, my hearty."

"I tink so neider," added Fritz, lighting his pipe and nodding sagely.

"Put out the lights," said Jack. "We will employ the same tactics as they have to keep our movements covered. As long as you were pursuing them in a blaze of light they could see you and keep out of your way."

"True fer you, my lad," assented Tim, complying: "an' that wuz the worry argymint as I used afore we picked yer up, which accounts fer yer not a-seein' our light a-comin' along."

"I wondered why you extinguished them," said Jack, "while I was swimming."

The Warrior now proceeded in total darkness, and half of our friends turned in for some much-needed rest.

Nothing was seen of the enemy's boats, and the next day dawned bright and clear, with scarcely any wind.

Fritz prepared a tasteful breakfast, and when Jack assumed

charge of the wheel he saw several distant sails, but no sign of the three whalebacks, and concluded that they were left astern.

The Warrior had gone rapidly ahead when her batteries were cleaned, and at that rate was bound to have distanced the enemy's boats.

Upon a nearer approach to the nearest ship, which proved to be a huge merchantman, Jack saw that the crew was closely watching him with their glasses.

"What do you make her out to be, Tim?" he asked.

"Bless me! she ain't a-flyin' no flag," replied the sailor.

"No, but her crew are an odd-looking lot."

"Ain't them some niggers on her deck?"

"Two of them, half naked, are being chased by some of the men."

"Aye, now I see! She's a Portuguese ship from Afriky."

"But those negroes?"

"Can't yer see through it—she's a slaver, sir."

"By Jove! Are you sure of it?"

"I'd swar to it, Jack. An' yonder's an English frigate."

"There's no trouble in seeing, anyhow."

"Keel haul me, now—are yer a-go'in' ter board her?"

"Of course I am. If she's a slaver I'll set the negroes free."

He headed the Warrior for the merchantman, and as soon as the crew of the latter vessel observed this manœuvre they began to crack on sail after sail until her spars were all burdened.

"They are taking to flight, dear boy," commented the professor.

"Much good that will do!" retorted Jack. "We will soon overhaul her."

He increased the speed of the Warrior, and despite the fact that the ship was forging ahead at the rate of fifteen knots an hour, the ironclad rapidly bore down upon her.

All this while the negroes Jack had seen were eluding their pursuers, who were beating them with ropes' ends in an effort to drive them down below, and when the ironclad arrived within fifty yards of her they both sprang overboard, screaming with pain, and swam toward her.

Fritz rushed down to the lower deck, and when they came alongside he lowered the wire ladder and they came up on deck.

Both men were as black as ink, and half naked.

They were weeping with pain, arising from the cruel lacerations upon their bodies, and presented a pitiable spectacle.

"Sabe us! Sabe us!" cried one of them in good English.

Jack left the wheel in Tim's hands and went down to them.

"What's the matter?" he asked of them.

"Dey done try fo' ter kill us, massa!" replied the man, in broken tones.

"Who do you mean?"

"De Portuguese slavers on dot ship, sah."

"Have they got slaves on board of her?"

"Oh, Lawdy! dar am hundreds ob dem!"

"Savages like your companion?"

"All wild niggahs from de African woods, massa."

"You don't seem to be very wild."

"I'se a freedman ob Liberia, sah, an' wuz took wif de res'."

"Where is the Portuguese bound for?"

"I 'specs he am gwine ter Tripoli, sah. Done got blowed out ter sea in de storm. Dat's how he am out yere, I reckon."

"You stay here and I'll investigate your story."

Tim ran the Warrior alongside the merchant ship, and Jack sprang upon the deck and was met by the captain.

He was a tall, ugly-looking fellow, with a black beard.

"Well, sir?" he demanded, in his native tongue, as he haughtily drew himself up and regarded Jack with a scornful air. "What do you want?"

"I am here to examine your ship in quest of slaves," re-



plied Jack, paying no attention to his grand airs and speaking Portuguese fluently.

"By what right do you dare to intrude upon my vessel, sir?"

Jack pointed at the proud banner of America floating at the portable flagpole on the Warrior, and replied, coolly:

"By that right!"

"This is an outrage——"

"Bosh!"

"And your country shall answer for it dearly."

"Humbug!"

"Moreover, I won't allow a search."

"Nonsense! Do you see my guns, sir?"

"I am not afraid of them."

"Nor are they of you. They will uphold my actions!"

A savage scowl crossed the captain's dark face, and he cried: "If you dare to attempt any outrage I shall protect my ship!"

"See here," sternly replied the boy, "don't you interfere with me if you know when you are well off!"

The captain fairly swore with rage.

Just then one of his men approached and whispered something in his ear that caused a look of relief to cross his face.

He dismissed the sailor with a wave of his hand, and, turning to Jack, with a more amiable air, he said:

"After all, I have changed my mind, sir."

"What about?" asked Jack, suspicious of this sudden change in his demeanor.

"You can examine my craft, but I warn you that you will not find any slaves on board of her, as you expect to."

"That remains to be seen."

"I have a cargo of whisky on board, besides some general merchandise."

"Be kind enough to let me examine it."

The captain procured a ship's lantern, lit it, and telling the boy to follow him, descended the midship hatchway into the hold.

By the light of the lantern the boy saw several hundred whisky casks heaped up in the dark place amidships, while forward and aft was a collection of boxes, barrels, crates and cases.

Rats were scampering about in armies.

"Strange, that with so much whisky down here, I can't smell any," said Jack.

"Because the other odors drown it," uneasily answered the Portuguese.

The boy grasped one of the casks to "heft" it. when, with a lurch of the ship, it rolled down and struck the floor with a crash; the head flew out and there sounded a terrific yell of alarm and pain inside of it.

A moment later out rolled a negro boy.

Jack uttered a cry of astonishment, and the captain recoiled.

Instantly the truth flashed across the boy's mind, and he cried:

"You've got a lot of slaves headed up in those casks!"

Seeing that his treachery was exposed, the captain turned as pale as death and a hard look came into his eyes.

Drawing a pistol from his pocket he aimed it at Jack's head.

"Since you know all," he hissed, "I will kill you before I would allow you to leave this ship and expose me!"

He held up his hand warningly.

"Don't you fire at me!" he exclaimed.

"I am going to prevent your betraying me," replied the captain.

"By so doing you sign your own death-warrant."

"How do you mean?" queried the captain, struck by his words.

"If I fail to return to my vessel in five minutes my crew have orders to open fire on this craft and blow it to pieces."

The Portuguese was overwhelmed by this announcement.

He started and lowered his weapon despairingly.

"Can we come to terms?" he asked, in husky tones.

"Name your conditions," replied the boy.

"I shall liberate these negroes for my liberty."

"How can you free them?"

"Did you observe the English frigate, off to the windward?"

"I saw the vessel, but was not sure she was a warship."

"My plan is to put the negroes aboard of her."

"Agreed."

With this understanding Jack and the captain went upon deck, and the boy returned to the Warrior and sent the two negroes back aboard of the Portuguese vessel.

In order to have no mincing of matters, the young inventor explained the situation to his friends, and having put everything in readiness he sent his boat beneath the surface.

Then he sent Fritz out in a diving suit, with a hawser having clamps on the end of it, and fastening their teeth upon the stem of the merchantman, and the other end of the rope to a stanchion, he started the camera obscura after extinguishing the lights.

With a view of the sea spread out upon the table in the pilot-house, the boy started his ironclad toward the English frigate, and to the amazement of the Portuguese crew the ship was dragged along through the water toward the gunboat.

Here Jack left her, confident that the slave question would be settled, and continued on his way.

A short time afterward the camera showed him the negroes being transferred from the ship to the frigate, and he was satisfied.

The Warrior continued on her way, three days, without any of her crew seeing Blackburn's boats, and finally came in sight of the Hebrides, when a bee-line was made for the Butt of Lewis, in order to cross the Minch for the Orkney Islands.

Along the northern coast of Scotland the weather became so cold that our friends were obliged to don heavier clothing.

The coast line was very rugged and the sea rough, while the surface was dotted by innumerable fishing boats.

None of them came near enough to the Warrior to observe the peculiar construction of the submarine ironclad, however.

"We had better keep on the surface as much as possible here," said Jack to the professor, as they sat in the cabin at the close of the day. "There are so many rocks and shoals in this neighborhood that it would be extremely hazardous to venture below for navigating."

"In three days more, dear boy, we should reach our destination, shouldn't we?" queried Hopkins, examining a chart.

"Barring accidents," replied the boy.

"Do you know that I have got at the real truth about the big Maelstrom to which we are going, my youthful friend?"

"In what have you enlightened yourself, professor?"

"Every point on the subject."

"Let me have the theory of the whirlpool, will you?"

"Of course I will. The most violent tidal current is that of Salten Fjord, to the south of Bodo, on the northwest coast of Norway, known as the Saltenstrom," replied Hopkins. "It is dreaded on account of its turbulence and the number of its vortices. Opposite Salten Fjord on the western side of Vest Fjord, the wild, jagged range of the Loffoden Islands runs

## CHAPTER XI.

### THE CORRIEVRECKEN OF THE HEBRIDES.

Although surprised by the captain's action, Jack did not lose his presence of mind for a moment, as he faced the revolver.



like a row of sharks' teeth from north to south. Between two of the most southern of the group, Moskens and Mosken, runs the Moskenstrom, a tidal current, which after low water commences to flow toward the northeast, then it gradually changes its direction to east, to south, and at high water to southwest. After half an hour's cessation the ebb begins to flow toward the southwest; at half ebb, west, and then gradually turns through north to northeast at low water. The current thus rotates round Mosken once in twelve hours."

"That circle probably gives rise to the sandy sea, then?" said Jack, "for if no current carries the sand away it simply remains circling around the island, stirred up continually and thus keeps the water blurred."

"Very likely, for it runs at a velocity of seven miles an hour when a strong wind blows in the same direction," replied the professor, "and as the sea-bed is very irregular there, and rises abruptly from two hundred fathoms seaward of Mosken to twenty fathoms in the channel and Vest Fjord, the flow is very turbulent, with occasional whirlpools and opposing currents set up along the shore."

"Isn't it equally as dangerous around the Faroe Islands?"

"Several dangerous tide-races exist there, in which are dreaded whirlpools, the worst being the Querne, off Sand Island, and one round the rock of Sumboe-musk, off Suder Island," replied Hopkins. "The Shetland and Orkneys are also traversed by a system of formidable tideways, called roosts, dangerous to fishing-boats, and frequently forming whirlpools."

"Then we are nearing a dangerous locality?"

"To be sure we are. The swiths or swells of Swona, in Orkney, the whirlpool of the Swalchie, off Stroma, and the Merry Men of Mey, in the Pentland Firth. Have you any idea where we are now?"

"In the channel of Jura Sound," calmly replied Jack.

With one leap the professor was upon his feet as if electrified.

"What?" he cried, turning as pale as death.

"Anything the matter, Hopkins?" queried Jack.

"Great heavens, boy, the Corrievrecken—the worst whirlpool around the Hebrides—is in this channel!" exclaimed the startled professor.

Jack was amazed.

"He ran up into the pilot-house, where Fritz held the wheel.

They were in a channel less than a mile in width, the water of which was all shallow, being no more than fifteen to twenty fathoms deep from the shore outward, where the deepening was abrupt.

It resembled the channel of Mosken and that of the whirlpools of Messina, being narrow, and of irregular configuration.

The sea to the west was about seventy fathoms deep, a trough over fifty fathoms deep and quarter of a mile wide running through toward the east, deepening toward the centre to one hundred and five and one hundred and twenty fathoms in consecutive holes.

It was to this fact, in all probability, that the tidal stream, running sometimes nine miles an hour, was due, with its great vortices, as well as the dangerous counter-currents and overfalls.

When Jack entered, Fritz looked up at him with a puzzled expression.

"Vot in dunder vhas dot noises I hear?" he asked.

It sounded like a distant, gurgling moan, and the boy replied:

"You had better turn back at once. We are running in danger."

"Who's der matter?"

"It's a whirlpool."

"Vot! Der Maelstrom?"

"No—the Corrievrecken."

"Och, der boat don't vhas turn."

"By heavens, we are caught in the current, then!"

Jack took the wheel and stopped the machinery, but the Warrior was dragged along swiftly through the water, and they felt her being sucked over toward the whirling vortices.

"In heaven's name, don't let her get fairly caught in the current!" implored the professor, wildly. "If you do we won't get out again."

The surface of the water was flecked with froth, and had an extremely agitated look.

Jack reversed the screws and a struggle began between the boat and the powerful current, for every time he attempted to turn the bow around to sway her away it was swung back.

The machinery of the boat now gained the supremacy, and she was gradually backing away when Jack chanced to glance off toward the southward, when he saw a small fishing smack.

Its sail was torn to ribbons and useless, and it contained a young woman, who was without oars, wildly gesturing to the boy, for her little cockleshell was caught in the fierce tide.

"Look there!" exclaimed the boy, pointing at her.

"Poor creature! She's doomed!" groaned Hopkins.

"Won't the vortice capsize her boat and drown her?"

"As sure as fate, dear boy!"

"Then I'll try to save her!"

"Lord! you may jeopardize our lives!"

"Are you afraid to risk it?" quietly asked Jack.

For a moment the timid professor hesitated; then he exclaimed:

"No. Try to save the poor creature, Jack!"

"I knew you was a man all through!" said the boy.

He had to steer the boat close to the western vortice, and as soon as he was able to work her, he did so.

The fishing smack was caught by the current by that time and was being swept swiftly along toward the moaning caldron, and Jack drove the Warrior over toward her.

No sooner was this done when the Warrior was caught by the current again and they had to reverse the screw once more.

Leaving the wheel in Fritz's hands the young inventor darted to the lower deck and flung a rope to the shrieking female.

She caught it as it fell across her boat and made it fast.

The Warrior was unable to back away from the whirlpool now, and was being swept swiftly along toward the vast spinning circle when Jack released the anchor.

Down it went with a splash toward the bottom.

## CHAPTER XII.

### DESTRUCTION OF THE WHALEBACK.

The Warrior slid along, her anchor dragging in 150 feet of water and seeing that it would not hold, Jack let the other one go.

It caught presently, and the ironclad came to a pause.

She swung around with the current and hung there steadily enough, upon seeing which the boy went over to the lee bulwark, and dropping the accommodation ladder down to the girl in the smack, he cried:

"Come up on deck now, if you like."

She answered him in a language he did not understand, but she seemed to know what the ladder meant, and ascended it.

The girl was about twenty years of age, tall, strong, suntanned and had bare feet and a bare head, while her garment consisted of a sort of coarse fabric dress, with a short skirt, and a low neck.

Her face was very homely, and she was evidently a fisherwoman.



The professor joined Jack and the girl began to speak, when Hopkins said:

"She's a native of Howmore, South Uist. I understand some of the dialect."

"How did she get in this hapless condition?"

"Last night she got caught in the powerful current of the whirlpool, but managed to get away from it in a gale, but becoming caught on a rock she clung there with her boat till we came along. Her strength failed her and forced to let go, the current caught her. Her sail was useless and in the storm she had lost her oars so she had to drift along with the current until we picked her up."

"Well, as soon as the ebb tide sets in the current may abate enough to let us get way from here. As soon as that occurs we will set her ashore."

The professor explained this to the girl, and she thanked the boy again and again, with tears in her eyes, for all he did for her.

Several hours passed by, during which the girl remained out on deck, and supper was served.

It transpired, as Jack expected, that the current abated at ebb tide and they hauled up the anchor, and the Warrior was enabled to get out of that dangerous locality.

The girl was given a pair of oars and went ashore, and the Warrior proceeded on her way through a glorious night.

On the following day she arrived at the mouth of the Minch, when Tim, who was on lookout upon the hurricane deck, suddenly yelled:

"Thar's two o' ther whalebacks!"

"Is it possible!" exclaimed Jack, in amazement.

He left the wheel in the professor's hands and hurried out on deck.

Off to the southwestward there rolled upon the sea two elongated bodies, coming on in pursuit of the Warrior like streaks of lightning.

Both boats were fast sailers.

As soon as he saw them his temper arose to the boiling point.

"You are right! They are overhauling us fast!" he exclaimed.

"Neither one o' them is armed, are they?"

"They were not when I last saw them, but Blackburn may have guns on them," replied Jack. "At any rate, I'm going to give them a tussle!"

"Whar's ther Spitfire!"

"Out of sight yet."

The boats were a league away yet, and Jack brought his boat to a pause and examined his guns.

They were all loaded and made ready for action.

On came the two boats until they arrived within a mile of the stationary Warrior, when they came to a pause.

Jack keenly watched them with his glass, and saw several men appear upon the decks of both vessels, assiduously working.

He was puzzled to account for their actions, until at last he directed a binocular at them and observed that they were both bringing a gun apiece up from within the boats.

They were mortars for throwing shells, and had no sooner been secured to the deck when the intentions of the men were made manifest by their discharging a shell apiece at the ironclad with wonderful precision.

Through the air they came screaming toward the Warrior, and while one of them went clear over her, the other struck the ironclad on the port broadside and burst.

A terrific report followed.

Thousands of particles of broken shell flew in all directions, and had not the deadlights and windows been covered by the metal shutters they would have been blown to pieces.

Shaken from stem to stern by the shock, the Warrior re-

coiled and a huge hole was left gaping in the plates between her sternmost and midship gun turrets.

"They have struck us!" exclaimed Jack.

The boy had always enjoyed such advantages over his enemies hitherto that he was much surprised to have the tables turned on him.

Fritz ascertained what the damage was.

"Ve don't been able ter go under water now!" he exclaimed.

"The damage can be repaired," calmly replied the boy.

He went on deck in a suit of armor, and aiming the bow-chaser at the nearest boat very carefully, he turned the crank.

A volley of thuds followed.

With each explosion of air a missile was discharged.

Away screamed a score of projectiles toward the boat, and several of them struck her in rapid succession.

A series of explosions followed.

Then a shower of metal and water flew up in the air.

It looked as if there was a submarine volcano in a state of eruption where the shots struck.

As soon as it subsided the whaleback was gone.

It had been literally blown to fragments by the dreadful engine employed by the boy, and its crew all perished with it.

A second shell came flying from the other boat, and shot across the deck behind Jack, carrying away part of both bulwarks.

Fortunately it did not explode till it cleared the ironclad.

Jack turned the gun around to bear upon the whaleback, but before he could get aim at her a third shell came flying toward him and the boat took to flight.

The shell struck the after part of the cabin and tore it away, a piece of the flying shell striking Fritz and wounding him.

"Och! Donner und blitzen!" he yelled as he fell. "I vhas det!"

The professor, who was a good doctor, hastened to the boy's side, and kneeling down there examined his injuries, which were slight.

"Have ye sunk the whaleback, Jack?" cried Tim, from the turret.

"No. She has escaped me by retreating!" the boy replied.

"Bless me, yer didn't leave much o' ther other, though."

"I'll serve the fugitive the same way, sooner than let Blackburn use her against me."

They kept a sharp watch for the whaleback, and after half an hour saw her still receding far astern of them.

"There she is now!" exclaimed Tim, pointing at her.

"Get under way and chase her!" cried the boy.

He remained at the gun, hoping to get a shot at her, and Tim swung the Warrior around and started her after the boat.

Upon finding they were pursued, the crew of the boat put on full power and drove her at full speed, when she gained on the Warrior and began to distance her.

Jack sent a shot flying after the fugitive, but the swell of the sea and the corkscrew movement of the Warrior spoiled his aim so that the cylinder missed its mark.

Before the boy could fire again she was out of range.

On ran the ironclad, and after a while the whaleback appeared, still farther away, heading for Pentland Firth.

"Let her go if you can't hit her, dear boy," said the professor, appearing just then. "If you do, they will run into the whirlpool of Swelchie or the Merry Men of Mey."

"Sure enough! I'll drive them into it!" said Jack. "Put on full power, Tim."

"Aye, aye, sir!" cheerily answered the old sailor, obeying.

Swifter went the ironclad, kicking up a shower of spray at her keen, razor-like bow, and it became a fast race between the two boats, which were evenly matched in point of speed.

Mile after mile was covered in this way until the whale-



back dashed into the Pentland Firth, south of the Orkney Islands.

According to an old Norse legend, the salinity of the sea is derived from the Swelchie, while the folk lore of Great Britain tells of horrible sea monsters dwelling in the roaring surges of Corrievreckan.

The island of Stroma loomed up and they saw the whaleback go dashing into the roost and get caught in the tideway.

When too late the unlucky crew aboard of her saw into what a terrible snare they had gone plunging, and made a strenuous effort to get themselves out of it.

Too late! Too late!

They could not swing her around.

In order to keep her going Jack discharged a volley from the gun toward her, and in despair they fled from the screaming shots.

When they saw the whaleback again she was in the swiths, and went flying around in the boiling water like a straw in the grasp of a tornado.

"That settles her fate!" exclaimed Jack. "She can't withstand being dashed to pieces on yonder rocks."

"I'm sorry to see her destruction!" said Tim, sadly.

"Then turn the Warrior away to safe waters, old friend!"

"Aye, aye, lad, aye, aye!"

Tim brought the Warrior about, and she dashed away to leave the Firth, for the gyrating water with its tenacious clutch upon the whaleback was sweeping her around in vast circles, and gradually sucking her toward its roaring vortex.

### CHAPTER XIII.

#### THE MAELSTROM.

There were extra plates on board of the Warrior, and during the run that followed, Jack and friends repaired the damage done by the shells so well that when completed she did not look as if she had received so much as a scratch.

Although the Loffoden Islands are within the Arctic circle, the mean temperature does not exceed thirty-eight degrees, and in summer their lofty, precipitous peaks are only covered by patches of snow near the top.

About 20,000 men of Scandinavian birth and Lappish descent, followed the herring, cod and lobster fishery there, and were a hardy vigorous race of people, generally inoffensive, but withal coarse, rough and uneducated.

This much the professor knew of them, and confided to the rest, as the Warrior came in sight of the southernmost island.

"I suppose, my Christian friend," said he to Tim, that afternoon in the cabin, "in your varied experience you have been in these waters before?"

"Waal, now, I reckon I have," replied Tim, loftily, as he took a chew of plug; "thar ain't many countries in ther world as I ain't been ter, professor."

"Indeed! I presumed you had traveled a great deal."

"It happened durin' a whalin' v'yage as I took onct," said Tim. "We sot sail from St. Petersburg, Rushey, went down ther Gulf o' Finland inter ther Baltic Sea, out ther Cattergat inter ther Skager Rack, an' nor'ward ter Tana Fjord at North Cape, whar ther blizzard caught us."

"Blizzard! What blizzard, my good fellow?"

"Why, ther one wot ripped up ther waves an' turned their crests inter icicles; ther one wot beat down ther aurora borealis on our course till we sailed through red, white an' blue air, ther one wot froze ther clouds an' dropped 'em down in solid ballstone chunks aroun' us big as icebergs; ther one wot——"

"Oh, yes, I got caught in that blizzard myself!" hastily interposed Hopkins.

"Did yer hear o' ther whale wot pulled our ship out o' ther ice floe like a horse'd pull a cart through ther mud in a country road in a storm? Yer see, we got nipped an' wuz givin' up all hope when I harpooned ther lubber, an' off he went fer ther open water with a sheet o' ice between our ship an' ther sea. I got down on his upper deck an' put a rope in his mouth ter steer him like a horse, an' he brung us out when——"

"Oh, yes—I see you survived it," blandly interrupted the professor, who now began to know when Tim was lying.

"Hum!" grunted Tim, and he "stowed his jawing tackle."

The Warrior made good headway, and in a few hours arrived in sight of the Sandy Sea and the terrible Maelstrom.

Every one was in the pilot-house to view the whirlpool.

With the rise of the tide it acquired a monstrous velocity, the vast bed of the waters, seamed and scarred into a thousand conflicting channels, burst suddenly into frenzied convulsions, heaving, boiling and hissing.

It gyrated in gigantic and innumerable vortices, all whirling and plunging on to the eastward, with a rapidity water elsewhere never assumes except in precipitous descents.

In a few minutes more there came another radical alteration over the scene in the dusky twilight which had now settled down.

The gyratory motions of the now subsided vortices seemed forming the germ of another whirl more vast than the first.

It suddenly assumed a distinct and definite existence in a circle of over a mile in diameter, the edge of the whirl having a broad belt of gleaming spray, but not a particle of it slipped into the terrific funnel, the interior of which, as far as the eye could fathom it was a smooth, shining, jet-black wall of water.

It inclined to the horizon at an angle, speeding swiftly around and around with a swaying and sweltering motion, sending forth to the night winds a noise, half shriek, half roar, such as even the mighty cataract of Niagara never could raise in volume.

Nothing could escape the violence of that vortex.

Whales caught in it were swallowed down, and the largest ship was engulfed as easily as the smallest boat.

The influence of the mighty wheel was felt for a radius of miles away, and the sand at the bottom was so stirred up as to make the surrounding sea like sloppy mud, it was so thick.

The four navigators glanced at it in awe.

So this was the terrific freak of nature which they had come to brave in a boat which would be as a mere grain of sand in the clutch of this appalling current.

"Well," breathed Hopkins, "are we to brave this thing?"

"It looks dangerous," admitted Jack, reluctantly.

"Och, dot vhas der vorstest ting vot I effer vhas seen," said Fritz.

"'Pears ter me," added Tim, "if a ship ever foundered in that 'ere thing thar wouldn't be much salvation for even one o' its timbers."

"Then you imagine that if the treasure ships, Viking and Skager Rack, went down in the whirlpool," said Jack, "they would get torn to pieces and leave but little of the treasure behind?"

"Aye, aye, lad!" assented Tim.

"Well, judging by this diagram of William Hawkes, they went right down in the vortex. A current runs in from south to north, and another runs out from north to south. Both currents meeting at that spot are whirling the sea around. There may be a rock at the bottom, or there may be a great hole into which the sea gurgles and flows away like water in a stationary hand-basin. We must solve the problem."



"Then yer a-goin' down?" queried Tim, dubiously.

"To-morrow, between ebb and flood tides, at a moment when the great wheel of water rests from its violence for a while," replied Jack.

That settled the matter.

He told Fritz, who had recovered from his wound, to head the boat for shore.

According to the diagram he held the vessels must have gone down in the tide flowing from south to north, and if the vortex did not contain the boat, it had probably been swept away between the island and the mainland.

At all events the boy resolved to first sound the vicinity of the whirlpool and then go down and form his estimate there of about in which direction the ships had been carried, if they were not there.

The Warrior reached the island and came to anchor.

The shore was low and rocky here and rolled away in a bleak pasture land at the foothills, where some sheep were grazing.

Supper was served and the night watch set.

Then Jack, Tim and Hopkins turned in.

On the following morning Hopkins was on duty before the rest were up, as he had relieved Fritz, when a large boat came along the shore, dragging a grapnel over the taffrail.

She was manned by a large crew and carried several guns; there was a man in diver's costume upon her deck, and the people seemed to be made up of islanders, Swedes, Norwegians and Danes.

Upon sighting the Warrior she was sailed over to the submarine boat and the captain gave Hopkins a hail in the Norwegian tongue.

Opening the door and going out on the hurricane deck Hopkins, who spoke Norwegian fluently, asked them what they wanted.

"Tell me what brings your warship here?" replied the captain.

"You must excuse me if I fail to do so," politely replied Hopkins.

"That is a mysterious way to treat me," growled the Norwegian.

"Perhaps so, my good fellow, but as our business is not told to every stranger we meet, you cannot blame us. Since you are so candid, why don't you tell me what you are doing?"

"I have no objection," replied the captain. "It has recently come to the knowledge of all the inhabitants of these islands that two treasure ships, the Viking and Skager Rack, were swallowed up by the Maelstrom, and we have all abandoned our business of fishing and joined in one grand party to search for the treasure. Every man of these islands and every boat on these waters are enlisted."

"Indeed!" said the professor, with a start of surprise.

"Banded together in a brotherhood, with the purpose of finding the treasure and divide it equally among ourselves, we have all sworn to drive away any foreign vessels which may come here for the same purpose, as the loss of the treasure is an open secret. That is the reason I have asked what your boat was doing here, and I repeat the demand now."

"And if I refuse to inform you—what then, sir?"

"You will incur our enmity and cause us to drive you away." Hopkins laughed sarcastically.

"That would be utterly impossible," said he, "for we are on the same errand as yourselves!"

This announcement caused the crew of the ship to cry out with surprise, and a babel of voices at once arose on all sides.

When the furor had subsided somewhat the captain yelled: "What admission shall be your death warrant!"

"What? Would you dare to attack us, my good fellow?" asked Hopkins.

"It is my intention to blow your craft out of the water, for if I do not do it my messmates will!" replied the captain.

He did not suspect the character of the Warrior, for the broadside guns were masked and there was a cover on the bow-chaser.

He issued some orders to his crew.

The ship went off on the port tack and one of the gunners began to prepare one of the big weapons for action.

The professor passed inside and hurried down to the gun-deck.

"I'll open their eyes!" he cogitated.

Approaching one of the port guns he aimed it at the ship, and having drawn a bead upon it he fired the piece.

Away screamed the projectile, and striking the Norseman's topmast it burst with a violent intonation that shook the sea.

A yell from the ship's crew greeted this shot.

It surprised every one.

Returning the compliment, however, they discharged their gun with a loud report and the shot struck the Warrior with a crash that knocked her over on her beam ends.

It glided off, however, without doing any more harm than to leave a huge dent in the plates.

The shots and concussion aroused Jack and the rest, and they came flying out on the gun-deck to learn the cause of the disturbance.

In a few words Hopkins explained what had occurred.

## CHAPTER XIV.

### INTO THE WHIRLPOOL.

As soon as Jack understood the situation he realized the seriousness of the situation they were in, for he knew that they now would have a great deal to contend with.

The ball had been opened, however, and they would have to abide by the consequence, if they stuck to their resolve to carry out the project which brought them to this place.

A second shot was fired at the Norseman, and swept the after-deck, carrying away several of the crew to destruction.

That sufficed to let their enemies know Jack's power, and they incontinently fled, leaving the Warrior master of the situation.

"We are only rid of them for a short time, you can rest assured," said Jack, gravely. "They will go about spreading the news among their people that we are here, and a large fleet of vessels and an army of 20,000 men will soon be scouring these waters on a hunt for our lives."

"Them lubbers might not a-been so dead sot agin us if ther las' shot we fired hadn't a-swept some o' them inter Davy Jones'," observed Tim, giving a hitch at his pants.

"I tink so neider," added Fritz, "but ve vhas got some adwandages on dem so long dot ve been able to dife down outder de vay."

"We will find navigation under these sandy waters no easy matter, my Christian friend," observed the professor, seriously, "for the electric lignts won't be able to penetrate it much easier than so much slush. Are you going down this morning?"

"As soon as we have breakfast," replied Jack.

The Norseman soon disappeared up the coast, and our friends glanced out at the island.

It was a desolate place, without much vegetation, and bristled with dark rocks which arose in the interior into the form of a small mountain where herds of sheep were feeding with some cattle and goats.

Fritz prepared breakfast for them, and when it was finished, everything was made ready for a descent, as the damage



done by the shells from the two whalebacks was skillfully repaired.

Jack assumed charge of the wheel, and had Fritz ready in a diving suit in case of an emergency, while Tim attended to the searchlight, which was controlled in the turret, and the professor took up his station at one of the after dead-lights.

Starting the boat out toward the channel containing the whirlpool, Jack put the pumps in motion, compressing the air below into the end reservoirs, and turning another valve, he let the sea water into the spiracles below.

The Warrior settled down into five fathoms of water before Jack brought her descent to a pause and started her ahead.

Then he turned on the electric lights.

It was as dark as Erebus until the brilliant glow shot through the sandy water, and he glanced out the window.

A most curious spectacle met his view.

The water did not have that dark-green tinge it usually had where it was clear, but now had a peculiar silvery hue as the brilliant rays of the electric lights struck the sand that was stirred up and held in suspension.

It seemed as if the Warrior was floating in a mass of molten metal that was in a constant boil.

There were millions of fishes of every known variety and species common to those waters, floating around.

Strong as the searchlight was, its rays penetrating a mile ordinarily in clear water, it now showed nothing beyond one hundred feet in advance of the boat, while the halo from the deadlights did not extend more than five yards.

Up through the sandy water there extended a spongy-looking mass of weed, covered with silvery particles, and upon turning the light around Tim saw that it covered a broad area, and was swaying with an undulating movement.

The Warrior cut through it like a knife, for aquatic plants instead of growing down in the ground like terrestrial growths, spring up and hang suspended in the water.

As the boat moved ahead, swarms of fishes dashed away to the right and left in affright at its approach, and clearing the seaweed it went over a mass of black, shiny rocks.

Further on the bottom was sandy.

Here great sand dunes arose, great valleys yawned, and dark, bottomless pits gaped in the depressions, while small eddies spun around here and there, spirating the sand up and boring holes down like augers.

On glided the ironclad and then she was caught in a swift current which had worn a deep trough in the bottom, laying bare thousands of shells and shell fish.

Swept along by this tideway, the Warrior began to describe a curve, and the searchlight showed that the bottom was rapidly shelving downward until it exceeded a depth of fifty fathoms, in the shape of an enormous bowl.

Jack pointed at it and turning to Tim he said:

"We are approaching the whirlpool."

"Lord a'mighty, lad, be yer a-goin' through it?" gasped Tim.

"Yes. It is evident that the whirlpool is like a cart-wheel in movement. Upon the surface or rim we would go around in vast, sweeping circles, which would gradually narrow as we drew near the centre. Now, around the axis the gyration is shorter, but stronger and faster, until it dwindles down to a spinning point no bigger around than my arm. At such a point, which must be near the bottom, we can't come to much harm unless——"

"Unless wot?" asked Tim, uneasily.

"Unless there are rocks at the bottom upon which we might get dashed, or unless there is a cavity into which the water is sucked that might drag us into it."

"Save us! I never heerd tell o' a ship wot went down in that 'ere pool hull, but wot it wuz headed up agin, ground ter pieces."

"Well, we will soon see," said Jack, quietly. "I would not venture into it unless I had perfect confidence in the stability of my boat. Look out, now, she feels the current strong!"

With a sudden rush the Warrior darted ahead.

She was now on the edge of the roaring vortex, and they plainly heard the thunderous booming and awful, gurgling shriek of the spinning waters ahead of them.

Jack kept injecting water into the central chamber, and the ironclad gradually sunk lower and lower, each moment, in the seething, sandy brine.

At the same time she began to go rushing off to the eastward at a prodigious rate and commenced to circle around and around, very plainly showing the young inventor that the movement on the surface extended far downward.

They now observed great masses of driftwood, water-logged and otherwise, go floating around with them in that sweeping circle, mixed with great masses of seaweed.

This debris converged toward the axis of the whirl, and the further down the boat descended the solid the mass became until at last they saw it gyrating in a solid collection at least fifty feet in thickness, forming a core for the funnel.

How many gallant ships this great quantity of wood represented!

The question was: Had the Viking and Skager Rack shared in the general fate and mingled their timbers with them?

The Warrior made several revolutions around this central core, each sweep dragging her nearer to the vortex, and Jack kept her going down, down, down until the register indicated a depth of three hundred feet.

This was one hundred feet deeper than any ordinary diver could descend in a regulation outfit without perishing.

The darkness grew so dense now that if it were not for the extreme brilliancy of the electric lights they could not have penetrated the pasty water with their gaze more than a few yards.

Only one care was to be observed with the electric lights to insure them burning, and that was to frequently change the carbons, which an automatic mechanism attended to.

There was plenty of compressed air in the boat to last a week if it did not escape, and the heat arising from compressing it was kept subdued by the mechanical injection of water through the reservoirs.

Tim turned the searchlight downward.

Far below then gleamed the bottom through a cloud of sand, which kept being pumped up by the whirling of the waters.

Among the grit there shone the dark outlines of hundreds of ships' anchors, and all kinds of metal work, intermingled with the remains of human beings and ironbound woodwork.

Some distance ahead a mass of rock cropped up, upon which the base of the whirlpool's column was going to pieces, the water assumed a white, frothy look, and a smothered noise so great arose that the inmates of the boat were half deafened.

The indicator marked a depth of seven hundred feet.

It was observed that the lower they went the less they felt the current, until, upon arriving close to the bottom, it vanished.

The remains of the debris torn by the iron-like rock from the base of the vortex were hurled surfaceward like cannonballs by their own buoyancy, and carried away out of the whirlpool's influence.

The Warrior glided over to the rock and paused.

She settled down on the sandy bottom directly beneath the enormous funnel of the whirlpool, and glancing out the window of thick glass, Jack saw that they were in a region of extreme tranquillity among the relics of thousands of wrecked ships.



## CHAPTER XV.

## BENEATH THE WHIRLPOOL.

Quietly resting at the bottom of the great bowl-shaped cavity in the sand beneath the thundering whirl of the maelstrom, at a depth of seven hundred feet, our friends were comparatively safe.

By glancing upward it was plain to be seen that the theory of the scientific gentlemen of the Nineteenth Century as to its origin was pretty near correct, for on one side of it the hurrying current, running north, and on the other side the swift tideway, running south, were both plain to be seen.

It was like a boy rolling a pencil between the palms of his hand, for the faster the currents swept along the harder the water whirled.

The huge mass of rock beneath the vortex was evidently harder than iron to withstand the wear it was subjected to for many centuries.

It was this rock which figuratively tripped the two currents up as they ran in opposite directions, and, running them together, caused the gyrations which was going on, and the air in the mouth of the funnel very likely caused the unearthly noise.

Every one of the crew of the Warrior gathered in the pilot-house now and peered out at the strange scene spread before them.

"The theory of Kircher is exploded!" said Jack, as he pointed out the window. "The whirlpool is due to only natural causes."

"Vot Kircher vhas tort about id?" queried Fritz, curiously.

"He contended that whirlpools marked the entrances to subterranean channels connecting different seas, and the phenomena of tides were produced by the alternate flow of water in opposite directions. In regard to the Maelstrom, he contended that this water, after pouring into the vast funnel, flowed along a channel under the Scandinavian peninsula and rose in the Gulf of Bothnia. When the level of this gulf had been raised to a sufficient height he thought that the current was reversed, and aided by a stream pouring through a subterranean tunnel from the White Sea, raised the tide on the coast of Norway. To account for the Gulf Stream and Antarctic drift he placed a grand vortex at the North Pole, down which all the water of the ocean tumbled, and passing through the earth's axis emerged at the South Pole, thus keeping up a circulation like that of blood in the human body."

"He oughter vhas schvum inter dot holes und pulled it in after him," said Fritz.

"Do you think we could venture out of the boat, dear boy?" asked Hopkins.

"Let me see—we are 700 feet down," said Jack, glancing at the depth indicator. "That's twenty-two atmospheres, or about 230 pounds pressure to the square inch. As each one of us exposes about 6,000 square inches of surface, we would here have to bear a pressure of 1,380,000 pounds apiece, against 90,000 on the surface—a difference of 1,390,000 pounds."

"I tin' ve don't petter go oud," said Fritz, very rapidly.

"And I quite agree with you," replied Jack, with a smile, "for if we did, in an instant the pressure would squeeze us to a pulp. Just hear how the Warrior is cracking, snapping and groaning, yet she is braced up by the strongest steel frame and cross-braces procurable."

"S'posen we finds ther treasure here?" ventured Tim, "how are we ter git it?"

"With grapnels, of course, worked from within the boat."

It was not likely they would find it there, however.

They busied themselves watching the curious objects littered about upon the sandy bottom, and having gratified

their curiosity Jack started the boat ahead and said to the professor:

"Now, if the two treasure ships were caught in the northern-bound current, as William Hawkes' chart seems to indicate, it is barely likely that they may have been carried beyond the influence of the Maelstrom, and that would give us scope to search for them up along the coast of the island."

"At the outer edge of the current it is strongest," replied Hopkins, "so we must follow that part as it would be most apt to carry the wrecks along there than near the shore."

"I'll make a circuit of the base of the whirlpool, then," the boy answered, "and we will then go back the way we came from and keep a sharp lookout for some sign of the wrecks."

They were not sure that the whirlpool had not ground the ships to pieces, they did not know whether they were buried out of sight in the sand, and they could not tell whether they were carried far up the coast, or out to sea by the strong currents; so they had to follow the most practical course left open to them.

Around the base of the roaring whirlpool the ironclad glided, and keeping along the bottom she proceeded in the north-bound current.

Everywhere the basin of the Maelstrom was littered with the remains of ships, cargoes and dead fish killed by the conflicting currents.

The great mass of rock towering up one hundred yards from the sea bottom was of a cone-like shape, worn smooth as glass in places and as rugged as a crater in others.

But as far as Jack could see there was no tunnel in it.

The course pursued by the ironclad was up a slight incline now, and with the professor at the stern deadlight and Tim and Fritz on either side, a sharp lookout was maintained for the treasure ships.

In this manner they left the bottom of the whirlpool far astern, with its grim collection of relics of wrecks, flotsam and jetsam.

Upon mounting one hundred feet from the lowest depression she ran into a great school of fishes and eels, crabs and lobsters, all of which preyed upon human flesh.

These cannibals of the whirlpool were lurking about the place, awaiting victims of the Maelstrom's fury, who were so abundantly supplied to them all the year round.

Unlike the more timid class of fishes they did not swim off at the approach of the ironclad, in alarm, but eyed it with ravenous looks and wolfish expressions, many of the more venturesome boldly dashing against its hull with gaping mouths as if anxious to tear it to pieces.

Passing through them the Warrior finally left the great depression and got upon a more level plain among the sand dunes and eddies.

The sandy water sparkled and snapped close around the Warrior, but further away was stirred up in misty, impenetrable clouds, in and out of which the living denizens floated like shadows.

A most peculiar effect was to see them gradually merging into view until from a dark spot they grew into their natural proportions, and then whisking off, melted gradually away, little by little, again until they dissolved from view.

Every object that was met with went through this ghostly performance, owing to the density of the brine, and everything they encountered was thickly coated with a mantle of sand.

It was veritably a sea of sand.

Jack watched it intently and was deeply engrossed in thought, when he received a sudden shock of surprise by hearing a strange voice behind him suddenly exclaim:

"Hello, old fellow! How are you?"

It was not the voice of any of his friends, which made it



all the more strange, and looking around he failed to see any one.

Instantly it flashed across his mind that there was something very uncanny in this voice, and he recalled a ghostly tale to mind that was connected with this place.

A beautiful mermaid was wont to charm a noble viking by her enchanting voice at night, as she rode on the billows and he wandered on the shore, until at last he plunged into the sea and swam out to her, when he was swept into the whirlpool and sucked down into its depths.

Amid the dreadful cries of the krakens and trolls, his voice arose on the winds of boisterous storms in a sad, plaintive lament, and the Norse mothers frightened their children to sleep when the wind howled over the crags by assuring them it was the viking's voice.

The story was absurd, yet it dawned upon Jack's mind when that strange voice startled him, for he could not think how any one could get aboard of the Warrior under the sea to speak to him.

After a moment of silence there sounded a shrill whistle, a peal of cackling laughter and the voice yelled:

"Holy Moses, cully, why don't you notice a fellow?"

And Bismarck, the parrot, hopped from under a chair.

Jack burst into a merry peal of laughter over his first superstitious impulse, and remarked:

"You're a queer fellow, Bismarck, 'pon my word!"

"You bet!" chuckled the parrot as if he understood what was said.

Whiskers came in just then, and catching sight of the parrot, chased him back into the cabin, where he caught the bird.

Getting a firm grip on Bismarck the monkey began to separate his feathers and make an examination beneath, in quest of something, at which edifying amusement he seemed to derive great comfort.

The Warrior was soon beyond the influence of the whirlpool, and caught in the north current, was swiftly swept along.

Jack now caught sight of the wreck of a ship dimly outlined in the distance by his searchlight, and heading the boat for it he shouted the news through the speaking-tube to his friends.

Turning his attention toward the window again he was now startled to see a huge, dark body, like a rock, looming up ahead.

Jack sent the Warrior surfaceward to avoid it, but the moment she emerged, to his alarm he saw that a vessel, under steam, was rapidly rushing upon the Warrior.

The next instant a cry of amazement pealed from his lips.

"It is the whaleback!" he gasped. "She has escaped the other whirlpool."

The crew of the boat now saw the Warrior in the gloom.

They made an effort to change their course and Jack spun his wheel around as rapidly as possible.

But they were both too late.

Then came a crash.

Both vessels had come in collision.

The next instant a scene of great confusion ensued.

## CHAPTER XVI.

### FIGHTING A SEA DEVIL.

The bow of the whaleback struck the Warrior abaft of the midship turret, at a point where the ironclad was fortified strongest by her armor.

No harm was done to the Warrior.

But a part of the other's prow was bent and twisted out of

shape and several large holes appeared in elongated streaks upon her runs.

The water began to pour into them, upon ascertaining which the crew aboard of her set the engines to work, and sent her to the land pumping her out as fast as the sea water poured in.

Jack was knocked flat on the floor and his boat described a circle and descended, as he had his hand on the lever and jerked it around.

By the time the boy got upon his feet the Warrior was stationary, tangled in the rigging of the wreck, buried in a depth of thirty fathoms of water.

Jack stopped the pumps and saw, astern, the rock he had gone up over.

His friends now came rushing in.

"What struck us?" gasped Hopkins.

"The whaleback!" replied Jack. "I went to the surface and we collided and descended again."

"Wasn't she lost in Pentland Firth?"

"Apparently not."

"Any injury done, dear boy?"

"None to us, I believe. The enemy was badly damaged."

"Mein Gott!" said Fritz, "I tort ve vhas oxbloded our-sellufs!"

"I'll see if thar's any damage," said Tim, stumping out.

"Vot is dot wrecks ve vhas tangled up mit?" asked Fritz.

"I thought it might be one of the treasure ships."

"Den vait, und I go me out und see to dot."

"Take an axe and cut the rigging away from the Warrior."

"Yah!" replied Fritz, hastening away.

Jack looked at the register and saw what depth they were in, then he glanced down at the wreck over which they were hovering.

It was a large ship.

"Dear me! what a misfortune!" said Hopkins, dolefully.

"If the whaleback is here the Spitfire must be near," said Jack.

"Just my opinion, exactly!" replied the professor.

Fritz appeared out on deck at this moment, in his diving suit, armed with an axe with which he cut away the cordage in which the Warrior was entangled, and as soon as she was free Jack lowered her to the bottom beside the wreck.

The Dutch boy went down a ladder to the bottom, which was here strewn with rocks covered by sea moss and lichens, among which there gleamed innumerable star-fish.

Proceeding to the bow of the wreck he read the name, saw that a hole had been stove in her planking, examined the spot on the Warrior where the whaleback collided with her, and returned to the deck.

"Well?" shouted Jack, through the audiphone in the window.

"Dis shib vhosn'd neider der Wiking nor der Skager Rack," replied Fritz; "der name vhas der Jenny Jones, of New York, und she vhas stofe in by der bow alretty vonct."

"Did you see where we were struck?"

"I oxpect so. Der vhasn't even a dent."

"Good! Now go aboard of the wreck, and if there is anything worth saving upon her, bring it out," said Jack.

Fritz nodded and went over on the Jenny Jones.

She lay heeled over on one side, two of her masts yet standing and the third was broken off close to the deck.

The vessel looked as if she had undergone rough handling, for she was battered up all over, but looked as if she had not been sunk long.

The door of the captain's cabin, aft, was closed.

Fritz opened it and entered.

A lurid streak of light shot from the lamp on Fritz's helmet and showed him that the cabin was in a disordered condition.

Jammed in the berth at one side lay the body of a man with a beard, wearing the garb of an officer, whom he inferred was the captain.



Owing to the cabin door having been closed no fishes had reached him, and his body was fairly well preserved.

He clutched a parcel in his hand and evidently perished while he was in the act of trying to save it from his sinking vessel.

Fritz took it from him.

A short search revealed nothing else worth taking, and he opened the door to take his departure.

Tim was just about to go out when an enormous and most villainous-looking angler, or sea devil, shot in, struck him a blow and knocked him flat on his back.

There is probably no more hideous object than these creatures in the whole sea, its rough, uncouth body being about five feet long, with a huge head and an enormous mouth with which it is constantly eating.

These cunning hypocrites have projecting from the upper part of their snouts a curiously long, flexible, curved spine, tipped with a bit of glittering membrane looking like the shiner on a fishing-line.

Burying themselves in an ambush of mud or sand they lie in wait till some unwary fish nibbles at their natural shiner and thus devour so many that fishermen try to catch them to get the enormous quantity of fishes that are crammed into their stomachs till they are puffed out of shape.

Upon seeing what a frightful creature struck him, Fritz pulled the axe from his belt, and in a storm of passion over the blow he got, aimed a thump at the homely creature.

It got a severe gash, and turning upon the boy with ugly ferocity, it swam at him with its jaws distended, caught his head in its mouth and snapped its jaws together.

For a moment Fritz imagined his head was about to get bit off, and yelled for help at the top of his voice, struggled to tear himself away, and pounded frantically with his axe at it.

The metal helmet prevented the monster's teeth coming together, but it kept them shut on the neck of the helmet, and left Fritz to fight, kick, pull and struggle furiously for a few moments, trying to extricate his head.

By dint of hard fighting he finally managed to tear his head away from the determined grip of the monster, and recoiling a few paces he saw the fish flash by.

It crossed the cabin, and, turning around, came flying back at him again, bleeding from a dozen gaping wounds.

Fritz raised his axe with both hands.

He fastened his eyes on the sea devil, and as it surged up to him he brought down his weapon with all his strength.

The blade of the axe struck it square on the head, and was imbedded there up to the handle, so terrific was the blow.

It knocked the sea devil down to the floor of the cabin, and the Dutch boy gave a grunt of satisfaction.

"I make sausage meat out of you vonet!" he growled.

There was no fight left in the fish after that, and he picked up the parcel he had dropped to the floor, and hastening to the door he passed out on deck and hurried toward the Warrior.

Reaching the deck he entered the water-chamber, closed the door, turned a lever and pumped the water out.

This done, he passed in on the gun-deck and disrobed.

His friends had seen the parcel in his hand, and he went up into the pilot-house and told them what happened to him.

"You had a narrow escape," said Jack, "for although those sea devils are not combative, if once you arouse their enmity they are, I have heard, veritable fiends."

"What is in your parcel, my Teutonic friend?" queried Hopkins.

"How I know me dot?" growled Fritz.

"Open it," said Jack.

The package was wrapped and tied in a piece of canvas, and unfastening it the Dutch boy disclosed a small, tin box.

It had a tiny brass lock on its lid, and they broke it open.

Within the box lay a number of folded papers and a letter,

and upon opening the latter they saw that they were filled with diamonds of all sizes and kinds.

"Hello! You've got a fortune here!" observed Jack, in surprise.

"I tink so alretty," chuckled Fritz.

"Let's see what this letter says," added Jack, opening it.

Then he read aloud in French, which he translated:

"MESSRS. RODGERS & Co.—Herewith we beg to send you a box of gems on consignment for Peters Brothers of your city. Captain Hardy has kindly consented to deliver them safely to you, as he has done similar consignments, after his return from Christiania. We will advise you of all particulars by next mail. Yours, J. BORDEAUX & Co."

This letter explained the situation clear enough.

"This ship left Havre for Christiania, I suppose," said Jack, "and was bound for New York when the accident befell her."

"And I know Rodgers & Co. to be the consignees of vessels in New York, dear boy," added Hopkins, "and Peters Brothers are a firm of the most prominent diamond brokers in the metropolis."

"Dear, if dot vhas der vay dings shtood," said Fritz, "when ve got back alretty, I vhas gief dem dimints beck by der owners, und dolt dem how I got 'em."

"Let us go to the surface and see what has become of the whaleback," said Jack. "Our treasure isn't to be found here, boys."

And so saying he started the Warrior for the surface.

## CHAPTER XVII.

### A SHAGGY FOE.

When the Warrior reached the surface Jack found that they were close to the Island of Vaer, but nothing was to be seen of the whaleback boat.

"They have made good their escape," said the boy to Fritz.

"Maybe dey vhas hidin' in vun of de lagoons?" suggested the Dutch boy.

"More than likely. At any rate, we have got to go ashore for water. Tim said we haven't got much left in our casks."

"An' thar's a stream now a-pourin' inter ther sea," said Tim.

"It is fresh water, too, as the shrubbery along its banks indicates," the professor commented, "and it runs into a pretty lagoon."

Jack saw the opening into the cave, and steered the Warrior toward it.

As soon as they arrived within the sheltered nook the anchor was let go not far from shore, and a portable boat was taken from one of the lockers in which a hose was coiled, one end of which was fastened to a donkey-pump on board the ironclad.

Jack and Fritz then boarded the boat, and while the boy rowed ashore his friend paid out the hose.

They went up the shore to the brook, which came down from the hills in the interior, and debarking with the end of the hose they found a clear pool and dropped the tubing in it.

A signal was then given to Tim, who thereupon started the pump on the ironclad and water was drawn aboard.

When everything was working satisfactorily the two boys drew the boat ashore, and, at Jack's suggestion, followed the course of the stream, which ran through a deep rift in the rocks.

They found themselves in a wild, rocky place, through which the stream came in pretty cascades and rapids, the solitude broken by no sound save the sighing of the afternoon wind



among the crags and boulders and the distant roar of the Maelstrom as the tide came in.

The rough, jagged rocks had a grand, picturesque beauty of their own, and it seemed as if no mortal but these two boys had ever passed over that spot since time eternal.

They proceeded ahead for some distance, admiring the grandeur of the scenery, when suddenly Jack, who was in advance, halted.

"Vot's der metter?" queried Fritz, glancing at him in surprise.

"Hush!" cautioned the young inventor, holding up his hand, warningly.

Some gravel had come tumbling down over the boulders from overhead, and, rattling upon the stones, rolled into the stream.

Then they heard a sound as of some one moving toward them.

It came from a rift at one side, which split the rocky passage in two, and was overgrown by some stunted pines.

"I don't tink ve vhas alone here alretty," whispered Fritz.

"Some one is coming this way, and no mistake about it!"

"Vot ve vill do—hide?"

"No. I'm armed with a knife."

"Und I vhas got a bistol."

They crouched against the boulders at the side of the passage, and keeping an intent look fastened upon the aperture, waited.

Every moment the sounds drew nearer until at last they were at the mouth of the opening, a few feet from where the boys stood.

"Look out, now!" muttered Jack.

The words were scarcely out of his mouth when a big bear appeared, which had, doubtless, swam over from the mainland, as they sometimes did.

Jack was startled at this unexpected sight.

"Shiminey Christmas!" ejaculated Fritz, in startled tones.

The brute was a monster of its kind, covered with dark, shaggy hair, and had evidently come down to the stream for a drink.

It paused upon seeing the boys, and began to growl ominously.

"The brute is in a hostile mood!" said Jack.

"Den let's knock der stuffin' oudt of it," Fritz answered.

"Be careful! They are ugly customers and hard to kill."

"I don't vas afraid, I bet you!" answered Fritz, drawing his pistol. "Und dot son-of-a-sea-gooks vhas made us fresh meat for some dime, I tink so, ain'd it?"

He aimed his pistol as he spoke, and fired a shot at the beast.

The ball struck bruin's shoulder and exploded, tearing away a mass of the flesh and filling the creature with rage and pain.

It arose upon its haunches with a thunderous roar, pawed at its wound for several moments, licked it off, and then dropped down upon all fours again and glared at the boys.

It only occupied a moment for the beast to make up its mind that its trouble was due to the boys, and with an inflamed look in its restless eyes it rushed toward them, lamely.

There could be no doubt that it intended to wreak summary vengeance upon the boys, and Fritz fired at it again.

Unfortunately, the ball only wounded the bear again, and ere Fritz could get out of its way, up it rose and seized him.

Such a hug Fritz never had before.

"Donner vetter!" he roared, wildly. "Led go of me!"

Jack pulled the knife from his belt and attacked the bear. Plunging the keen blade into its body he caused it to roar again and again, and let the boy go.

But it now directed its attack upon him.

"Run, Fritz!" he cried, as he recoiled.

The Dutch boy had dropped his pistol, and never waiting to pick it up he scrambled breathlessly away.

The bear went lumbering after Jack, who was retreating backward, and came on with extraordinary speed for such a clumsy beast.

Unluckily for Jack, he backed into a niche in the wall, and before he could get out of it the huge beast reached him.

Up it went on its haunches, growling, snarling, snapping its teeth together, and advancing its massive paws to seize him, when he stabbed it through the forearm, again and again.

He could not back or go to right or left on account of the stone wall encompassing his body, nor could he advance with the bear standing before him.

"Fritz, help me!" he shouted, in desperation.

Out shot the bear's wounded paw, savagely, and striking the boy a terrific blow on the neck, its claws scratched and hurt his skin and knocked him out upon the ground.

He had scarcely fallen when the beast pounced upon him, and planting both paws upon his body, it stooped its head and buried its fangs in his shoulder with a fearful sound.

A spasm of pain passed over Jack.

He felt as if he was on the point of being torn to shreds, for he could not move to defend himself, despite his struggles.

"Help!" he gasped, faintly.

Crash—bang!

It was a rock which Fritz had brought down on the bear's head with sickening force, and although it rebounded and struck Jack a painful blow on the leg, it caused the bear to relax its jaws.

Turning swiftly around it darted at Fritz.

Picking up a section of a limb of a tree which had floated down on the stream, Fritz turned upon his ferocious adversary and began to pound it with the club till it retreated.

Jack arose in the meantime, groaning with pain.

With one spring the angry boy reached the bear, and burning with malice at the cruel wound it had inflicted, he thrust his knife into its neck, severed the jugular vein and caused it to fall.

The bear was very weak by this time.

It lay with its tongue lolling out, whining and helpless.

For a few moments it remained thus, rapidly weakening.

And then it rolled over and expired.

"Victory!" exclaimed Jack, with a faint smile of exultation.

"You vhas hurted?" anxiously queried Fritz.

"He gave me a painful nip on the shoulder."

"Let me see vonct?"

Stripping the boy Fritz examined the wound.

It was of an extremely painful but not very dangerous character, and when the Dutch boy bathed and bandaged it Jack felt better.

They then set to work on the defunct bear, and skinning it, cut off the best part of its carcass, which they spitted on a pole and carried to the boat for stowage on the Warrior.

Several days passed by, during which our friends remained at the island, and Jack recovered from the wound.

It was then decided to resume their search for the treasure, and toward the close of a pleasant day they got the boat ready to depart.

The anchor was raised, the boat stowed away, and as soon as everything was ready, Jack entered the pilot-house and started the Warrior.

Fritz went down in the machinery department to lubricate the engine, while Tim passed out on the lower deck.

Hopkins was asleep in the cabin on the sofa, and Whiskers was busily employed pouring the contents of a bottle of mucilage in his hair.

It was Jack's intention to resume his search at the point where he left off, under the water, for somehow he felt confident that the two lost ships had not been destroyed by the whirlpool, as not the least trace of anything belonging to them was seen under the Maelstrom.



He sent the Warrior across the lagoon just at sunset, and she opened on the headland of high rocks and dashed out on the sea.

But scarcely had she emerged when the boy uttered a wild cry.

The ironclad was surrounded by a fleet of hundreds of ships, that swarmed with armed men and bristled with guns.

Like a flash it dawned upon the boy's mind that the crew of the ship with whom he had a brush, knowing his intentions, had spread the alarm among the rest of the fishermen.

Some one had located them.

Every craft about the island in one grand fleet had been gathered together to attack the ironclad and prevent its design.

And, worst of all, Jack beheld the whaleback now patched up, and the Spitfire, with Blackburn on her among the fleet.

It was evident his enemies were leagued with the islanders for his destruction.

## CHAPTER XVIII.

### BATTLE OF THE BOATS.

With a cry of alarm Jack summoned Tim, Fritz and Hopkins into the pilot-house, and rapidly expressed his view of the situation.

While this was going on an enormous roar pealed to the dusky skies from 20,000 throats, when the fishermen caught sight of the Warrior coming from the lagoon.

Hundreds of guns were pointed at the ironclad.

"Sink her ere they fire!" gasped Hopkins.

"That's our only salvation!" replied the boy.

He turned the lever, but the machinery failed to operate.

"Good Lor'!" gasped Tim, his good eye bulging. "Wot's ther matter?"

"She don't work!" groaned Fritz, in horror.

"There must be something the matter with the machinery!" said Jack.

"Och, it's my fault!" ejaculated Fritz, suddenly.

"Why?"

"I vhas oilin' der machinery——"

"Yes—yes——"

"Und I left der bump piston unscrewed!.

"For heaven's sake, fix it at once!"

"Yah! yah! Ach, du lieber Gott, noch ein mal!"

Fritz dashed down to the room on the gun-deck.

"Shall I man ther bow-chaser?" muttered Tim, eagerly.

"No. Out on deck you'd be blown to pieces. Take the port battery."

"And I?" faintly asked Hopkins, who was fearfully frightened.

"Man the starboard rapid fire gun, forward! Can you work it?"

"I believe I can," stammered the professor, tremulously.

"When I ring the gong begin to fire!"

"Very well, and may the Lord help me!"

"Go!"

Away stumped Tim, pursued by the professor, whose teeth were chattering while his knees knocked together.

It was no wonder he was frightened, menaced by a bigger battery, as they were, than any ever got together before on the sea.

Jack saw but one recourse.

That was to put on full speed and run the gantlet by flying between the grim array of armed men and vessels.

Accordingly, he turned the lever around to its furthest extent, and gathering speed the Warrior cleft the waves like an arrow shot from a bow, straight among the ships.

With one quick glance the boy had taken in the situation and saw that he could at least cripple the fire of some of the boats.

By dashing straight among them some would not dare to fire for fear of hitting their friends, and the boy could thus reduce the bombardment he had expected to get to its simplest factor.

The first shot came from the mortar aboard of the whaleback.

With a sullen roar it burst in the air over the Warrior harmlessly.

The second shot came from the gas-gun on the Spitfire.

With a scream it tore through the air and struck its mark.

It was a long cartridge ball of the cone shape, made of lead, and it hit the Warrior sideways, glanced off at an angle and dropped into the sea, with one side of it torn away by the Warrior's plates.

Just as a dozen random shots thundered from some others of the boats, the Warrior escaped injury by dashing among the fleet.

The Norsemen's boats were clustered so closely together that it was hard to find a clear passage between them.

But Jack did not pay much attention to that in his desperate charge for life among the fleet.

A large fishing smack choked up a channel he saw, and steering the flying Warrior directly at it the keen cutwater struck the boat with a grinding, splitting crash.

A shower of broken splinters flew up in the air, a great hole was stove in the bow, half the planking was torn from the side of the hull, and the fishing boat, literally smashed to pieces by the furious collision, filled up and sunk.

A terrible cry arose on all sides, and like a meteor the ironclad passed on, and reaching a passage, shot on, when the boy rang the gong.

The boats were thickly clustered on each side of the Warrior, and as Tim and Hopkins began to operate the guns a battery of deafening explosions followed that shook the sea.

They were followed by cries, yells, curses, the sound of splintering wood, and the continual volleys of small arms which the crews on the fishing boats kept pouring in upon the Warrior.

The devastation that followed baffles all description, and as soon as the guns Tim and Hopkins were working were exhausted they manned the two in each quarter turret, and commenced again.

By this time the fishermen were aroused to a frenzy of madness, and getting their guns in readiness they began to pour in a deadly fire upon the gallant Warrior from all sides.

Report after report roared over the darkening sea, jets of flame were belching out all along the line, and clouds upon clouds of smoke arose over the water, hiding some of the fleet.

The suspense was awful to Jack, as showers of small shot rained upon the tough hull of the Warrior without doing any damage to her thick plates.

His chief anxiety was aroused by the crashing of the cannonballs upon her armor, and the bursting of shells all around her, the flying pieces of iron hammering hundreds of abrasions and dents into the ironclad, while the railings and all parts that were unprotected were torn to atoms.

Still she plunged defiantly on.

Jack was nervous, but he kept as cool as possible in the face of the enormous danger they were in.

The noise that arose was so continual and deafening that it made his ears ring, and although he was wild to hasten Fritz's movements, he knew that it were utterly useless to call through the speaking-tube, as the boy would not be able to hear him.

On, on went the Warrior like a locomotive.

Boats that were in her way were ruthlessly knocked aside



as if they were made of tissue paper, many a shot fired from the left-hand side at her in passing, missed their mark, and poured into the boats on the other side, and the sea became littered with bodies and the debris of ships that were blown to pieces by Jack's awful guns.

No sooner were the midship weapons exhausted, when Tim and Hopkins manned the sternmost guns, and continued to pour out their destructive bombs, never pausing to take aim, but letting drive, right and left, assured that most of the shots were bound to hit.

Still no sound came from Fritz.

Jack now knew that the long delay portended trouble.

Unable to stand the suspense, he fastened the wheel and leaving the fugitive boat to forge ahead at random for a few moments he dashed down to the engine-room.

There lay Fritz on the floor, senseless.

A small aperture was burst in the side by a shot.

It was the only opening thus far made, but a piece of the flying metal had struck Fritz on the forehead, gashed it open and stretched the boy senseless.

Jack glanced at the pump piston, and saw that Fritz had repaired it before the fatal shot overtook him.

Seizing a broken piece of wood and a wrench, Jack drove a plug into the aperture, stopping it up, and assured that Fritz was yet alive, he dashed back to the turret.

Instantly putting the pump in motion he rapidly sunk her.

This manoeuvre was not done any too soon, for had she remained upon the surface one minute longer, she might have been blown up.

Down she descended a distance of three fathoms at an angle.

Jack then started the searchlight and the rest of the lamps.

They were out of sight of the ships' crews now, and the Warrior was in a badly battered condition, but still able to navigate.

For a moment Jack contemplated exploding some torpedoes under the fleet; but as this would involve a wanton sacrifice of life and he had to get the boat away to repair her as quickly as possible, he turned her to the eastward and made for the mainland.

A run of half an hour over the Vest Fjord to Nordland followed, in which it was crossed in less than an hour, during which time the old sailor and the professor carried Fritz up to the turret when Jack explained what he was doing.

Fritz soon recovered under their tender care.

Beyond the cut he got he suffered no injury, and soon was as happy as ever when he found that Jack saved them.

A long peninsula was finally reached, behind the sheltering arm of which the Warrior found a safe haven at an isolated part of the coast.

A week was passed here, during which time all the damage was thoroughly repaired so that the ironclad soon looked as if nothing but a severe battering had occurred to her.

It was then decided to cross the Fjord again and renew their search for the sunken ships, as Blackburn was now in league with the fishermen and might get ahead of them.

As there was every probability of the sea being swarming with their enemies' boats, they resolved to travel under water as much of the way as they could go.

The Warrior was submerged.

And under Jack's guidance she started off again.

## CHAPTER XIX.

### A LUCKY DISCOVERY.

The Warrior arrived at the wreck of the Jenny Jones, and, following the strong tideway, she took up a serpentine motion and thereby covered considerable ground by midday.

While so engaged her crew kept a sharp lookout.

Jack turned off all the lights when they had their luncheon, and sending the camera obscura tube aloft to the surface the lenses gathered in the scene upon the surface, and reflected what was going on there down upon the white-painted table top.

In every direction the boy saw scores of vessels going around under easy sail, with grapnels dragging from their taffrails, on a hunt for the treasure wrecks.

By this the boy shrewdly surmised that nothing had yet been found of the Viking and the Skager Rack.

These toilers of the sea had evidently given up their chase after codfish and herrings, temporarily, to follow the more lucrative calling of fishing for wrecks.

In the course of their trolling they had brought up the remains of many a fine craft sunk by the Maelstrom, and reaped a rich harvest from the sale of their finds.

This work was admirably facilitated by a number of diving outfits, with which they were provided.

"Some hope remains for us yet, boys," said Jack.

"Aye, but whar does them 'ere cussed wrecks lie?" growled Tim.

"I don't got some ideas dot der whirlbool left 'em whole," said Fritz.

"Well, my good friends," said Hopkins, "I've been making some very careful calculations, and I have come to the conclusion that we ain't hunting in the right place for the wrecks."

"How is that?" queried Jack, in surprise.

"According to the different strengths of the current which I have been testing it wouldn't be apt to sweep the wrecks anywhere near our present position, but would more likely carry them further away to the eastward."

"Then we will pursue that course," said Jack.

"Looker them 'ere boats!" said Tim, pointing down at the camera board. "They seem ter hev got on ther right scent like a lot o' sharks, if ther perfesser's idea is the right one as to ther bearin's."

There was a large fleet clustered off to the eastward.

They were tacking about in all directions, and among them they saw the oblong hulls of the Spitfire and her consort.

"I'm going to plant a torpedo under the whaleback boat and blow it up."

He directed Tim to steer the Warrior over to the selected boat and get under her, and then left the pilot-house and went to the armory.

Here he selected a large, horrorite torpedo of the cylinder type, a long coil of insulated wire, one end of which he secured to the great explosive, and he then put on a diving suit.

When this was done he went out on deck.

Tim drove the Warrior over to the whaleback, and having glided beneath the boat Jack attached the torpedo to the keel.

He then uncoiled the wire, and securing the other end to a binding post on the turret he motioned Tim to steer away.

This was done.

When the wire was all uncoiled he shouted:

"Press the battery key!"

Tim did so.

A terrific roar followed as the torpedo exploded.

Up into the air the boat and all its contents were blown, torn into such small fragments that when they came down, half a mile away, there wasn't a piece left as big as a trade dollar!

A satisfied look crossed Jack's face.

He was not spiteful, yet it pleased him to prevent his enemy utilizing the boats he had to thwart his plans.

"Excelsior!" he exclaimed.

Then he went toward the door to go inside, when something struck him and knocked him over upon the deck.



He glanced around and to his surprise observed that it was a ship's grapnel at the end of a drag-line.

Evidently one of the ships was passing by overhead.

The flukes of the grapnel just then caught under the floor edge of the hurricane deck and held fast there.

Instantly a tug ensued between them, for the Warrior was not far from the bottom and was going along moderately fast.

Upon observing what had happened Jack hastily arose, and hurrying over to the steps leading to the upper deck he ascended.

He had a knife in his belt, and withdrawing it he cut the grapnel from the end of the rope to release the Warrior.

Affected with a spasmodic contraction and tendency to twist and coil as most all ropes are by soaking in the water, the grapnel line gave a sudden squirm and coiled around Jack's leg.

It is proverbial that if a rope thus voluntarily snarls it will catch hold of just the thing it ought to leave alone.

Before Jack fairly realized what had occurred to him the vessel above passed to the right and the Warrior went to the left.

He was thus swept suddenly from the hurricane deck and carried along, suspended by the leg from the end of the rope.

Tim saw what happened as he was blinking out the pilot-house window at the time it occurred.

On went the vessel above, and off Jack was carried, hanging head downward in the water.

He instantly recovered his presence of mind, and glancing around saw the Warrior vanishing from view, for as the electric lights had been turned off to use the camera, there was nothing to keep it in view in the sandy water.

The boy seized the rope with both hands, and hoisting himself up he untwisted the end from around his leg.

This was no sooner done when by some means the other end of it became detached from the vessel it was fastened to and the weight of the boy carried it to the bottom.

He landed upon a bed of muddy ooze, with a shock that stirred up a dark sediment in the sandy water.

But recovering himself immediately he got upon his feet, and starting the electric light on top of his helmet he glanced around in an effort to see something.

This was a signal failure.

"Well," he muttered, blankly, "here's a go!"

Wondering whether his friends would find him by his lamp he walked away toward the west and came to a sandy place.

He was then in a depth of about 150 feet from the top.

"It won't do to wander away too far from this spot," he thought, "for I saw Tim looking at me, and he will be sure to come back at once, with the boat, and look for me."

A dim, shadowy heap ahead of him, faintly outlined, now attracted his attention, and with his curiosity aroused he strode toward it and saw that it was a mass of sand, out of which the stumps of several masts were protruding.

Upon a nearer approach he also saw the bow of a ship and upon it, in large, gilt letters, was the name

### "SKAGER RACK."

Jack's eyes bulged with surprise, and he came to a pause.

He looked harder now, and saw that there were two vessels lying side by side beneath the sand heap, the other all covered up.

"The lost treasure ships!" shouted Jack.

A thrill of delight passed over him.

In the exuberance of his joy he cut a caper and laughed outright over his lucky discovery.

The next moment he darted forward, and making a most minute examination he saw that he had made no mistake.

Here were the two lost ships.

The whirlpool had not destroyed them, after all!

"Jerusalem!" gasped the boy in a transport of delight. "Why don't Tim come back with the Warrior? Here's the treasure of the sandy sea, now, and all we need do is to get it out in order to insure our success of this voyage."

To insure marking the spot so it could be found again, he went and got the rope, and having managed to tear a loose plank from the ship he tied the rope to it and let it ascend toward the surface as a buoy, while he tied the other end of the line to one of the mast stumps.

Then he climbed upon the sand-covered wrecks, and, upon a close examination, he found that every nook and crevice was filled with the sand, inside and outside of the ships.

"But a few bombs would scatter it," he muttered.

Both ships were tied together with grapnel line, which accounted for them hanging together, and the current had, as the professor surmised, drifted them to their present location.

The boy might have continued his investigations further, but at that moment he heard a queer sound in the water and glancing up the light in his helmet flashed upon the figure of a man in diver's costume being lowered down by a rope.

The stranger saw Jack and beheld the treasure ships.

He then gave a tug at his life-line, and his friends upon the surface answered the signal by pulling him up.

A look of disgust crossed Jack's face.

"What did I send that buoy up for?" he muttered, reproachfully. "One of the ships' crews must have seen it and sent that man down to investigate."

"Now the whole crowd will know that the treasure is here, and they may come down in swarms and get it before Tim finds me!"

## CHAPTER XX.

### THE TREASURE OF THE SANDY SEA.

Jack was wild with impatience for Tim and his friends to appear, for it was evident that the diver who had just gone up would tell that he had seen the wrecks of the Viking and Skager Rack.

That would bring all the ships that were grappling on the surface of the sandy sea to the spot, when there was sure to ensue a struggle for possession of the treasure if it yet remained in the sand-filled wrecks.

Jack sat down on the deck of the Skager Rack and kept a sharp lookout for some sign of the approach of friend or foe, myriads of fishes swimming around him, and the distant thundering of the Maelstrom sounding in his ears.

"Hopkins' theory was right, after all," the boy muttered. "The outer edge of the north-bound current is the strongest, and that is why the wrecks were swept over here."

The way in which he had stumbled across the wrecks struck him as being singular, for if the grapnel of the ship above had not caught the hurricane deck of the Warrior and then twisted around his leg and carried him off when he cut it he might not have found the ships.

Jack had no doubt that by sending up the float to mark the location of the treasure he had attracted the attention of the crew of the craft that sent the diver down whom he had seen.

An hour passed by.

Then the boy was startled by seeing two divers come down. Both of them landed a short distance away from Jack, trailing their air tubes and life-lines behind them, and came toward him.

He flashed his lamp upon them and they saw him and paused.



Watching their fingers, by which he saw them conversing in the deaf and dumb alphabet, he read, one saying to the other:

"There he is now!"

"Shall we speak or attack him?" motioned the other.

"Find out first who he is."

They approached Jack with this understanding.

Pausing near him one of them began to spell with his fingers:

"Where did you come from?"

"The submarine ironclad," Jack, in the same way, replied.

"Where is your boat?"

"Not far away."

"What are you doing here?"

"Guarding these wrecks. By right of first discovery they are my property."

"Are they the treasure ships Viking and Skager Rack?"

"That is none of your business!"

Dissatisfied with the boy's replies the two divers turned their backs to him and conferred together for a moment.

When they turned toward Jack again they had evidently come to a certain understanding, for they beckoned to the boy to approach.

Wondering what they wanted, and utterly fearless, Jack jumped down from the wreck, within a few feet of them.

"They are English-spoken men, anyway," he muttered.

Just then the light from his helmet lamp streaked full upon the glass visor of the nearest man and plainly showed his features.

To the boy's astonishment he saw that the diver was Martin Blackburn.

Before the boy had time to get over his amazement the two divers started toward him and both of them seized him.

Jack struggled to get away, but they were powerful men and clung to him like a vise.

A moment afterward a terrific fight ensued.

The boy saw that the men intended to make a prisoner of him, and knew very well that should they succeed in this design there was every likelihood of them securing the treasure.

Down upon the ground he flung himself, rolling over and over, kicking, writhing, jerking and squirming.

Catching his foot behind Blackburn's leg he tripped the rascal up and then continued the struggle with his confederate.

He was a strong, active fellow, of a determined nature, and the boy was no match for him, but fought with all his strength.

Presently the two divers got on each side of him, and, gaining a firm grip upon his arms, they jerked their life-lines as a signal to those above to pull them to the surface.

Upon observing this the boy gave a sudden leap upward, and tearing his arms free he seized the divers' air tubes in each of his hands and doubled them in two.

They were thus deprived of all power of breathing.

Instantly they began to strangle, and, overwhelmed by a panic of alarm, forgot all about their intention to capture the boy.

Jack clung to the air tubes tenaciously.

A minute passed by.

By that time the divers were staggering on each side of the boy and were just upon the point of succumbing when their friends above answered their signal by hauling them up.

Forced to accompany them or let go the air tubes, the boy chose the latter course and the two half-smothered men shot up and left Jack standing upon the bottom of the sea.

He thus far had the best of his enemies.

But his victory was short lived.

A few moments after they reached the surface a large, round

object dropped down through the water not far from where he stood and burst with a smothered report.

It was a torpedo.

The flying particles of iron whizzed around the boy and lashed the surrounding water to foam and bubbles, many of the fragments striking against his suit with metallic jingles.

Fearful lest they might blow him to pieces, Jack fled.

Scarcely had he left the spot when down came a perfect rain of the explosives all around the place he had just evacuated, and report after report pealed out.

The sand was stirred up in clouds; it was blown away from around the two wrecks in showers, and the bottom of the sea was torn up in places, leaving great cavities.

Away hurried the boy to a safe distance, out of range of the bursting bombs, which continued to rain down all about the spot, the assailants hoping thus to destroy him.

The wrecks were laid bare and splintered to pieces.

Such loud explosions naturally aroused a great clamor, and to Jack's supreme delight attracted the Warrior to the spot.

Tim had been driving her all over in quest of the boy, for he did not expect Jack would be carried far on the drag-rope.

Owing to the density of the sand, although the ironclad had several times passed by in close proximity to Jack, he was not seen.

Now, however, the old sailor observed him.

And bringing the Warrior to a pause on the bottom, the boy got upon her deck, hastened inside, and unscrewing his visor, told his friends what had occurred to him.

By the time his recital was ended the explosions ceased as the people upon the surface stopped firing down their torpedoes, under the impression that the boy must have perished.

Jack sent the camera tube to the surface.

Upon the board was reflected a large fleet of vessels that were gathered about the vicinage of the float.

A busy scene was going on aboard of them.

Anchors were let go and scores of them came shooting down to the bottom, holding the vessels fast over the place where the treasure ships lay, and upon their decks the boy saw preparations going on to send down an army of divers.

"They are sure of the spot now," said Jack, grimly, "and are making great preparations to secure the gold. Look there; ships are yet hastening to this spot from all directions, and in a short time the whole fleet will be hovering over us."

"We'd better get right ter work ter get ther gold ahead o' 'em!" said Tim. "If we don't, my lad, we're done fer."

"Then you and Fritz get on your diving suits, leave the boat in the professor's care and come out with me," said the boy.

He steered the Warrior over to the wrecks and landed her beside them.

By that time his two friends were dressed and armed.

Leaving the boat they got out on the sand and under Jack's direction scattered and began to cut the anchor ropes of the ships, to let them drift away with the strong current.

The boy pulled down the buoy to mislead the men on the surface as soon as all the ships were cut adrift, and they then hastened over to the Skager Rack and Viking.

All the sand was blown away and the wrecks were partly demolished by the torpedoes that came down, but this simply aided them in getting inside of the ships.

They penetrated the holds, armed with grenades, and by a judicious use of them managed to blow the sand out of the interior.

Their efforts were crowned with success, for buried under a mass of debris and sand, in the after part of the hulls, they found the golden treasure they were in search of, encased in iron-bound boxes.

Our friends were thrilled with delight.



"At last! It is ours!" exclaimed Jack, jubilantly.

"Den ve mofe dem out apoard of der Varrior," said Fritz.

Setting to work they dislodged the treasure boxes and made a pile of them on the sand between the Warrior and the wrecks.

There were ten cases in all.

It was necessary, however, to raise them with tackles, and Tim and Fritz boarded the ironclad to rig the ropes, when to Jack's dismay there suddenly appeared an army of divers in the brilliant glow of the searchlight, coming from the gloomy waters beyond.

## CHAPTER XXI.

### BESIEGED BY DIVERS.

The strange divers saw at once that our friends had recovered the treasure from the wrecks, for the strong boxes were plain to be seen in the brilliant glow of the electric lights.

They came to a pause and the boy saw by their excited gestures that they were surprised and bent upon mischief.

A moment afterward his fears found foundation when he saw them come trooping forward to attack him, and try to wrest the boxes from his possession.

Springing upon the treasure chest he waved them back, but they had no fear of him, paid no heed, and kept on, waving their short-handled axes and knives in a threatening manner.

Jack realized that they were desperate.

A fearful encounter was inevitable.

He had one of his pistols with him, and pulling it out he aimed at the foremost man and fired.

The explosive ball struck his copper helmet and shattered it.

The man fell.

On rushed the rest.

Again Jack fired and this time he kept it up.

Four more of the divers dropped in their tracks and were rapidly hoisted to the surface by their friends above.

By this time Tim and Fritz, standing upon the deck of the Warrior, saw what was going on, and withdrawing their own weapons took a hand in the fray.

With their courage cooled the Norwegians came to a pause, for they could not contend against such firearms as these, and after a brief consultation they retreated and were soon swallowed up in the gloomy distance.

"Get your tackles ready—quick!" shouted Jack.

"Aye, aye!" responded Tim, cheerily.

"You shtay down dere und sling de boxes!" cried Fritz.

"All right—go ahead!"

They soon had their tackles prepared, running one end of the rope around the capstan, which the machinery inside operated, and telling Hopkins how to work it they dropped the rope over.

Jack then began to sling the cases with it.

At a motion from Tim the professor put the machinery in operation, and the capstan spinning around, coiled in the rope and pulled the heavy boxes up on the deck of the Warrior.

Box after box was thus raised rapidly.

In a comparatively short space of time our friends got them all up on the deck of the Warrior, and Jack sent his boat to the surface, when the Spitfire dashed into view.

Blackburn was in the pilot-house operating her, and she was gliding along swiftly.

A large number of the divers were hanging on behind the boat, screening their bodies behind the metal hull.

Jack saw them, at once realized what they were doing, and shouted the news to his friends.

"Look out!" he cried. "They mean to storm the Warrior!"

Blackburn stooped down, and aiming the protruding gas-gun at the Warrior, he deliberately fired a shot.

It struck the boat at close range with fearful force, and tore a gaping hole through the plates at the catheads.

"We are struck!" yelled Hopkins.

Jack rushed to the accommodation-ladder and hastened down to the deck, where he found Tim training the bow-chaser to bear upon the Spitfire.

"Turn her, Hopkins!" the boy shouted.

Just then the old sailor turned the gun-crank, and a projectile shot from the weapon with a terrific buzz.

It struck the Spitfire.

There sounded a most terrific roar as the shot burst, and with an awful upheaval the whaleback boat's broadside was blown out and she was knocked backward.

A dozen of the divers on the other side of her were killed and wounded by the shot, and the rest swam for the Warrior and clambered aboard of her, relieved of their weights.

Jack and his friends hastened inside.

The ironclad was now right in the midst of the whole drifting fleet, and upon the water's surface there floated some of the woodwork and a few of the bodies of the crew of the Spitfire.

Blackburn was among them.

His vessel was destroyed and he was killed.

The boy then glanced out of the window, a cry of horror pealed from his lips and he pointed down at the deck.

"Look there, boys!" he cried.

Every one was startled at the scene that met their view.

The divers who gained the deck had seized upon the big swivel gun in the bow, and having swung it around they had the muzzle pointed at the pilot-house.

The shot in the gun which they now intended to fire would suffice to blow the deck-houses off the Warrior.

One of the divers now seized the crank to turn it and fire the fatal shot.

## CHAPTER XXII.

### CONCLUSION.

"If that gun is discharged it will blow us into glory, boys!" said Jack.

"Vell, id von't go off!" exclaimed Fritz, vehemently.

He had a pistol in his hand, and moving the window open he aimed it carefully at the man standing by the breech.

A moment of suspense followed, during which every one was wondering which would be the quickest to fire—Fritz or the diver.

Everything depended upon the Dutch boy's aim, and they saw with dismay that his hand was violently trembling from excess of excitement.

There sounded an explosion.

Jack and his friends started violently.

But it was the Dutch boy who had fired.

The diver at the breech of the gun flung up his hands and fell.

"Hurroar!" exclaimed Tim.

Another diver leaped to the breech of the gun to fire, but again Fritz's weapon spoke, and he too fell.

By this time Jack and his friends had armed themselves with their repeating rifles and opened fire upon the rest of the divers down on the deck.

Unable to withstand the terrible fusillade they leaped into the sea and sank out of sight.

"The victory is ours thus far!" cried Jack.

"Aye, lad, but looker them 'ere ships!" cried Tim.



"The crews are preparing their guns, my dear friends!" Hopkins remarked, in tones of alarm, "and they may blow our craft to pieces now, for we can't dive out of their way on account of the hole perforating the hull up forward."

"We will have to run for it!" Jack decisively exclaimed.

"Aye, lad! We've got ther treasure," said Tim, "an' we ain't none o' us achin' fer more flight."

"Man the guns and point them!" said Jack.

His friends dispersed to obey this order, and the boy then started the ironclad away.

She had not gone far, however, when the artillery on the ships began to thunder and a volley of howling shots flew toward the ironclad from all directions, amid the yells of the ships' crews.

Some of the shells burst around the Warrior, some of the shots dropped short, others flew over her, some swept across the bow and stern and others struck her with terrific shocks.

In the midst of these shots Jack's friends began to operate the broadside guns, and Jack drove his craft along like a race horse, straight toward the Maelstrom.

The Warrior was badly battered by the shots, her upper works were greatly demolished, and yet not a shot had hit her where her sailing qualities could be interfered with.

The exchange of close range shots was brief, however, anxious as the ships' crews were to sink the Warrior so they could get the treasure and avenge themselves upon her invincible crew, for she sped along at the rate of nearly a mile a minute, and dashed into the roaring whirl of the Maelstrom.

None of the ships dared to follow her there, and the young inventor, depending upon the strength of the Warrior's engines to carry him safely through, ran the risk to throw them off his track.

Keeping well along the outer edge of the current, where its influence could not be strongly felt, Jack drove his gallant craft ahead till the whirlpool was passed, and the fleet of pursuing ships were left far out of range, astern.

She reached the limit of the sandy sea in a short time, and left it astern of her forever.

Out into the clear, dark-blue water of the placid ocean she dashed under Jack's guidance and the boy glanced back.

Far astern of the Warrior, what ships there were left of the big fleet, had come to a pause on the other side of the bellowing Maelstrom, unable to pursue the ironclad any further.

"Safe—safe at last!" cried the boy.

"They wouldn't dare to follow us past the whirlpool," said Hopkins.

"Vhy don't dey dry it?" pleaded Fritz. "I vant to see 'em sink!"

"Thar wouldn't be much ov 'em left if they did," remarked Tim.

"It's a good thing for us we passed the Maelstrom while it was in a state of activity," remarked Jack. "Had the water been smooth they might have pounded us with their guns so that the Warrior might have gone under."

Away the frigate dashed, further and further from her foes, until they gradually began to vanish in the distance.

Presently they disappeared from view altogether.

Jack headed his boat for the south by west.

He was jubilant over his victory.

It had cost him a good deal of trouble to secure that treasure, but he was bound to get it, and succeeded in spite of the fearful obstacles which had arisen to thwart him.

"Martin Blackburn has gained nothing by his villainy," he remarked to his friends. "He might have known that he could not expect any luck to arise from such work as his has been to cheat poor Hawkes and I out of the treasure."

"Such rascality as his always meets its reward, dear boy," the professor replied. "Great as our trouble has been, though,

I must confess I am satisfied. I've gathered a great many valuable relics during the trip, including numerous fine specimens of fish and shells, and feel amply rewarded by such scientific discoveries as I have made."

"I tink so neider!" solemnly said Fritz, and he took down his old accordeon from a shelf and played a mournful tune.

"Of all our perils," said Jack, as he turned the wheel a trifle to keep the Warrior on her course, "I am very well convinced that the one we just escaped was by far the worst I ever met with."

"Keel haul me fer a lubber," growled Tim, "but that wuz as narrow a escape as I had aboard o' ther ole frigate Wabash ther time her rudder wuz carried away by one o' ther enemy's shots durin' a storm off Cape Hatteras, wot lef' us a-drivin' on ther rock."

"How you vhas escape yourselluf dot?" queried Fritz, with a grin.

"Dropped our anchors!" chuckled Tim.

Biff! came a book Fritz heaved at him, and catching the old sailor on the nose it knocked him keel upward, whereupon Whiskers sprang at the leg of the Dutch boy's trousers, fastened his teeth there and Tim kicked Bismarck up to the ceiling.

There might have been a row had not Jack interfered by sending Fritz to ascertain the extent of the damage inside and Tim on the outside.

When they came in they reported that the Warrior was badly smashed, but could withstand a run to Bergen, where the damage could be repaired.

This was accordingly done, and in a few days the Warrior was put in a seaworthy condition, when they started for home.

An uneventful trip across the Atlantic followed, and the Warrior returned to Wrightstown, and our friends were given an ovation by the residents.

The treasure was sold, but as William Hawkes had died from the effects of his injuries and had no heirs, our friends divided among themselves the magnificent sum they realized.

When the professor left them to return to New York he took the box of diamonds found on the Jenny Jones to its owner and reported how they had came by them, for which our friends were heartily thanked.

The professor refused a reward, for his share of the treasure coupled with the fine sea specimens and fund of knowledge about the Sandy Sea and the wonderful Maelstrom amply requited him for his trouble.

As for Jack, Fritz, Tim, Whiskers and Bismarck, they settled down to the ordinary tenor of their ways at Wrightstown, happy and contented, for they had attained their object, gained fresh laurels, much wealth and great fame, and had no more to wish for.

[THE END.]

Read "GERALD O'GRADY'S GRIT; OR, THE BRANDED IRISH LAD," by Allyn Draper, which will be the next number (219) of "Pluck and Luck."

SPECIAL NOTICE: All back numbers of this weekly are always in print. If you cannot obtain them from any newsdealer, send the price in money or postage stamps by mail to FRANK TOUSEY, PUBLISHER, 24 UNION SQUARE, NEW YORK, and you will receive the copies you order by return mail.



# WORK AND WIN.

The Best Weekly Published.

ALL THE NUMBERS ARE ALWAYS IN PRINT.

READ ONE AND YOU WILL READ THEM ALL.

## LATEST ISSUES:

- 76 Fred Fearnot and the Governor; or, Working Hard to Save a Life.
- 77 Fred Fearnot's Mistake; or, Up Against His Match.
- 78 Fred Fearnot in Texas; or, Terry's Man from Abilene.
- 79 Fred Fearnot as a Sheriff; or, Breaking up a Desperate Gang.
- 80 Fred Fearnot Bailed; or, Outwitted by a Woman.
- 81 Fred Fearnot's Wit, and How It Saved His Life.
- 82 Fred Fearnot's Great Prize; or, Working Hard to Win.
- 83 Fred Fearnot at Bay; or, His Great Fight for Life.
- 84 Fred Fearnot's Disguise; or, Following a Strange Clew.
- 85 Fred Fearnot's Moose Hunt; or, Adventures in the Maine Woods.
- 86 Fred Fearnot's Oratory; or, Fun at the Girl's High School.
- 87 Fred Fearnot's Big Heart; or, Giving the Poor a Chance.
- 88 Fred Fearnot Accused; or, Tracked by a Villain.
- 89 Fred Fearnot's Pluck; or, Winning Against Odds.
- 90 Fred Fearnot's Deadly Peril; or, His Narrow Escape from Ruin.
- 91 Fred Fearnot's Wild Ride; or, Saving Dick Duncan's Life.
- 92 Fred Fearnot's Long Chase; or, Trailing a Cunning Villain.
- 93 Fred Fearnot's Last Shot, and How It Saved a Life.
- 94 Fred Fearnot's Common Sense; or, The Best Way Out of Trouble.
- 95 Fred Fearnot's Great Find; or, Saving Terry Olcott's Fortune.
- 96 Fred Fearnot and the Sultan; or, Adventures on the Island of Sulu.
- 97 Fred Fearnot's Silvery Tongue; or, Winning an Angry Mob.
- 98 Fred Fearnot's Strategy; or, Outwitting a Troublesome Couple.
- 99 Fred Fearnot's Little Joke; or, Worrying Dick and Terry.
- 100 Fred Fearnot's Muscle; or, Holding His Own Against Odds.
- 101 Fred Fearnot on Hand; or, Showing Up at the Right Time.
- 102 Fred Fearnot's Puzzle; or, Worrying the Bunco Steerers.
- 103 Fred Fearnot and Evelyn; or, The Infatuated Rival.
- 104 Fred Fearnot's Wager; or, Down a Brutal Sport.
- 105 Fred Fearnot at St. Simons; or, The Mystery of a Georgia Island.
- 106 Fred Fearnot Deceived; or, After the Wrong Man.
- 107 Fred Fearnot's Charity; or, Teaching Others a Lesson.
- 108 Fred Fearnot as "The Judge"; or, Heading off the Lynchers.
- 109 Fred Fearnot and the Clown; or, Saving the Old Man's Place.
- 110 Fred Fearnot's Fine Work; or, Up Against a Crank.
- 111 Fred Fearnot's Bad Break; or, What Happened to Jones.
- 112 Fred Fearnot's Round-Up; or, A Lively Time on the Ranch.
- 113 Fred Fearnot and the Giant; or, A Hot Time in Cheyenne.
- 114 Fred Fearnot's Cool Nerve; or, Giving It Straight to the Boys.
- 115 Fred Fearnot's Way; or, Doing Up a Sharper.
- 116 Fred Fearnot in a Fix; or, The Blackmailer's Game.
- 117 Fred Fearnot as a "Broncho Buster"; or, A Great Time in the Wild West.
- 118 Fred Fearnot and his Mascot; or, Evelyn's Fearless Ride.
- 119 Fred Fearnot's Strong Arm; or, The Bad Man of Arizona.
- 120 Fred Fearnot as a "Tenderfoot"; or, Having Fun with the Cow-boys.
- 121 Fred Fearnot Captured; or, In the Hands of His Enemies.
- 122 Fred Fearnot and the Banker; or, A Schemer's Trap to Ruin Him.
- 123 Fred Fearnot's Great Feat; or, Winning a Fortune on Skates.
- 124 Fred Fearnot's Iron Will; or, Standing Up for the Right.
- 125 Fred Fearnot Cornered; or, Evelyn and the Widow.
- 126 Fred Fearnot's Daring Scheme; or, Ten Days in an Insane Asylum.
- 127 Fred Fearnot's Honor; or, Backing Up His Word.
- 128 Fred Fearnot and the Lawyer; or, Young Billy Dedham's Case.
- 129 Fred Fearnot at West Point; or, Having Fun with the Hazers.
- 130 Fred Fearnot's Secret Society; or, The Knights of the Black Ring.
- 131 Fred Fearnot and the Gambler; or, The Trouble on the Lake Front.
- 132 Fred Fearnot's Challenge; or, King of the Diamond Field.
- 133 Fred Fearnot's Great Game; or, The Hard Work That Won.
- 134 Fred Fearnot in Atlanta; or, The Black Friend of Darktown.
- 135 Fred Fearnot's Open Hand; or, How He Helped a Friend.
- 136 Fred Fearnot in Debate; or, The Warmest Member of the House.
- 137 Fred Fearnot's Great Plea; or, His Defence of the "Moneyless Man."
- 138 Fred Fearnot at Princeton; or, The Battle of the Champions.
- 139 Fred Fearnot's Circus; or, High Old Time at New Era.
- 140 Fred Fearnot's Camp Hunt; or, The White Deer of the Adirondacks.
- 141 Fred Fearnot and His Guide; or, The Mystery of the Mountain.
- 142 Fred Fearnot's County Fair; or, The Battle of the Fakirs.
- 143 Fred Fearnot a Prisoner; or, Captured at Avon.
- 144 Fred Fearnot and the Senator; or, Breaking up a Scheme.
- 145 Fred Fearnot and the Baron; or, Calling Down a Nobleman.
- 146 Fred Fearnot and the Brokers; or, Ten Days in Wall Street.
- 147 Fred Fearnot's Little Scrap; or, The Fellow Who Wouldn't Stay Whipped.
- 148 Fred Fearnot's Greatest Danger; or, Ten Days with the Moon-shluers.
- 149 Fred Fearnot and the Kidnappers; or, Trailing a Stolen Child.
- 150 Fred Fearnot's Quick Work; or, The Hold Up at Eagle Pass.
- 151 Fred Fearnot at Silver Gulch; or, Defying a Ring.
- 152 Fred Fearnot on the Border; or, Punishing the Mexican Horse Stealers.
- 153 Fred Fearnot's Charmed Life; or, Running the Gauntlet.
- 154 Fred Fearnot Lost; or, Missing for Thirty Days.
- 155 Fred Fearnot's Rescue; or, The Mexican Pocahontas.
- 156 Fred Fearnot and the "White Caps"; or, A Queer Turning of the Tables.
- 157 Fred Fearnot and the Medium; or, Having Fun with the "Spirits."
- 158 Fred Fearnot and the "Mean Man"; or, The Worst He Ever Struck.
- 159 Fred Fearnot's Gratitude; or, Backing Up a Plucky Boy.
- 160 Fred Fearnot Fined; or, The Judge's Mistake.
- 161 Fred Fearnot's Comic Opera; or, The Fun that Raised the Funds.
- 162 Fred Fearnot and the Anarchists; or, The Burning of the Red Flag.
- 163 Fred Fearnot's Lecture Tour; or, Going it Alone.
- 164 Fred Fearnot's "New Wild West"; or, Astonishing the Old East.
- 165 Fred Fearnot in Russia; or, Banished by the Czar.
- 166 Fred Fearnot in Turkey; or, Defying the Sultan.
- 167 Fred Fearnot in Vienna; or, The Trouble on the Danube.
- 168 Fred Fearnot and the Kaiser; or, In the Royal Palace at Berlin.
- 169 Fred Fearnot in Ireland; or, Watched by the Constabulary.
- 170 Fred Fearnot Homeward Bound; or, Shadowed by Scotland Yard.
- 171 Fred Fearnot's Justice; or, The Champion of the School Marm.
- 172 Fred Fearnot and the Gypsies; or, The Mystery of a Stolen Child.
- 173 Fred Fearnot's Silent Hunt; or, Catching the "Green Goods" Men.
- 174 Fred Fearnot's Big Day; or, Harvard and Yale at New Era.
- 175 Fred Fearnot and "The Doctor"; or, The Indian Medicine Fakir.
- 176 Fred Fearnot and the Lynchers; or, Saving a Girl Horse Thief.
- 177 Fred Fearnot's Wonderful Feat; or, The Taming of Black Beauty.
- 178 Fred Fearnot's Great Struggle; or, Downing a Senator.
- 179 Fred Fearnot's Jubilee; or, New Era's Greatest Day.
- 180 Fred Fearnot and Samson; or, "Who Runs This Town?"
- 181 Fred Fearnot and the Rioters; or, Backing Up the Sheriff.
- 182 Fred Fearnot and the Stage Robber; or, His Chase for a Stolen Diamond.
- 183 Fred Fearnot at Cripple Creek; or, The Masked Friends of the Mines.
- 184 Fred Fearnot and the Vigilantes; or, Up Against the Wrong Man.
- 185 Fred Fearnot in New Mexico; or, Saved by Terry Olcott.
- 186 Fred Fearnot in Arkansas; or, The Queerest of All Adventures.
- 187 Fred Fearnot in Montana; or, The Dispute at Rocky Hill.
- 188 Fred Fearnot and the Mayor; or, The Trouble at Snapping Shoals.
- 189 Fred Fearnot's Big Hunt; or, Camping on the Columbia River.
- 190 Fred Fearnot's Hard Experience; or, Roughing It at Red Gulch.
- 191 Fred Fearnot Stranded; or, How Terry Olcott Lost the Money.
- 192 Fred Fearnot in the Mountains; or, Held at Bay by Bandits.

For sale by all newsdealers, or sent postpaid on receipt of price, 5 cents per copy, by

**FRANK TOUSEY, Publisher,**

**24 Union Square, New York.**

## IF YOU WANT ANY BACK NUMBERS

of our Libraries and cannot procure them from newsdealers, they can be obtained from this office direct. Cut out and fill in the following Order Blank and send it to us with the price of the books you want and we will send them to you by return mail. **POSTAGE STAMPS TAKEN THE SAME AS MONEY.**

.....

FRANK TOUSEY, Publisher, 24 Union Square, New York. ....190

DEAR SIR—Enclosed find.....cents for which please send me:

.... copies of WORK AND WIN, Nos.....

.... " " PLUCK AND LUCK " .....

.... " " SECRET SERVICE " .....

.... " " THE LIBERTY BOYS OF '76, Nos.....

.... " " Ten-Cent Hand Books, Nos.....

Name.....Street and No.....Town.....State.....



# SECRET SERVICE

OLD AND YOUNG KING BRADY, DETECTIVES.

PRICE 5 CTS. 32 PAGES. COLORED COVERS. ISSUED WEEKLY

## LATEST ISSUES:

- 82 The Bradys and the Brokers; or, A Desperate Game in Wall Street.  
83 The Bradys' Fight to a Finish; or, Winning a Desperate Case.  
84 The Bradys' Race for Life; or, Rounding Up a Tough Trio.  
85 The Bradys' Last Chance; or, The Case in the Dark.  
86 The Bradys on the Road; or, The Strange Case of a Drummer.  
87 The Girl in Black; or, The Bradys Trapping a Confidence Queen.  
88 The Bradys in Mulberry Bend; or, The Boy Slaves of "Little Italy."  
89 The Bradys' Battle for Life; or, The Keen Detectives' Greatest Peril.  
90 The Bradys and the Mad Doctor; or, The Haunted Mill in the Marsh.  
91 The Bradys on the Rail; or, A Mystery of the Lightning Express.  
92 The Bradys and the Spy; or, Working Against the Police Department.  
93 The Bradys' Deep Deal; or, Hand-in-Glove with Crime.  
94 The Bradys in a Snare; or, The Worst Case of All.  
95 The Bradys Beyond Their Depth; or, The Great Swamp Mystery.  
96 The Bradys' Hopeless Case; or, Against Plain Evidence.  
97 The Bradys at the Helm; or, the Mystery of the River Steamer.  
98 The Bradys in Washington; or, Working for the President.  
99 The Bradys Duped; or, The Cunning Work of Clever Crooks.  
100 The Bradys in Maine; or, Solving the Great Camp Mystery.  
101 The Bradys on the Great Lakes; or, Tracking the Canada Gang.  
102 The Bradys in Montana; or, The Great Copper Mine Case.  
103 The Bradys Hemmed In; or, Their Case in Arizona.  
104 The Bradys at Sea; or, A Hot Chase Over the Ocean.  
105 The Girl from London; or, The Bradys After a Confidence Queen.  
106 The Bradys Among the Chinamen; or, The Yellow Fiends of the Opium Joints.  
107 The Bradys and the Pretty Shop Girl; or, The Grand Street Mystery.  
108 The Bradys and the Gypsies; or, Chasing the Child Stealers.  
109 The Bradys and the Wrong Man; or, The Story of a Strange Mistake.  
110 The Bradys Betrayed; or, In the Hands of a Traitor.  
111 The Bradys and Their Doubles; or, A Strange Tangle of Crime.  
112 The Bradys in the Everglades; or, The Strange Case of a Summer Tourist.  
113 The Bradys Defied; or, The Hardest Gang in New York.  
114 The Bradys in High Life; or, The Great Society Mystery.  
115 The Bradys Among Thieves; or, Hot Work in the Bowery.  
116 The Bradys and the Sharpers; or, In Darkest New York.  
117 The Bradys and the Bandits; or, Hunting for a Lost Boy.  
118 The Bradys in Central Park; or, The Mystery of the Mall.  
119 The Bradys on their Muscle; or, Shadowing the Red Hook Gang.  
120 The Bradys' Opium Joint Case; or, Exposing the Chinese Crooks.  
121 The Bradys' Girl Decoy; or, Rounding Up the East-Side Crooks.  
122 The Bradys Under Fire; or, Tracking a Gang of Outlaws.  
123 The Bradys at the Beach; or, The Mystery of the Bath House.  
124 The Bradys and the Lost Gold Mine; or, Hot Work Among the Cowboys.  
125 The Bradys and the Missing Girl; or, A Clew Found in the Dark.  
126 The Bradys and the Banker; or, The Mystery of a Treasure Vault.  
127 The Bradys and the Boy Acrobat; or, Tracing up a Theatrical Case.  
128 The Bradys and Bad Man Smith; or, The Gang of Black Bar.  
129 The Bradys and the Veiled Girl; or, Piping the Tombs Mystery.  
130 The Bradys and the Deadshot Gang; or, Lively Work on the Frontier.  
131 The Bradys with a Circus; or, On the Road with the Wild Beast Tamers.  
132 The Bradys in Wyoming; or, Tracking the Mountain Men.  
133 The Bradys at Coney Island; or, Trapping the Sea-Side Crooks.  
134 The Bradys and the Road Agents; or, The Great Deadwood Case.  
135 The Bradys and the Bank Clerk; or, Tracing a Lost Money Package.  
136 The Bradys on the Race Track; or, Beating the Sharpers.  
137 The Bradys in the Chinese Quarter; or, The Queen of the Opium Fiends.  
138 The Bradys and the Counterfeiters; or, Wild Adventures in the Blue Ridge Mountains.  
139 The Bradys in the Dens of New York; or, Working on the John Street Mystery.  
140 The Bradys and the Rail Road Thieves; or, The Mystery of the Midnight Train.  
141 The Bradys after the Pickpockets; or, Keen Work in the Shopping District.  
142 The Bradys and the Broker; or, The Plot to Steal a Fortune.  
143 The Bradys as Reporters; or, Working for a Newspaper.  
144 The Bradys and the Lost Rancho; or, The Strange Case in Texas.  
145 The Bradys and the Signal Boy; or, the Great Train Robbery.  
146 The Bradys and Bunco Bill; or, The Cleverest Crook in New York.  
147 The Bradys and the Female Detective; or, Leagued with the Customs Inspectors.  
148 The Bradys and the Bank Mystery; or, The Search for a Stolen Million.  
149 The Bradys at Cripple Creek; or, Knocking out the "Bad Men."  
150 The Bradys and the Harbor Gang; or, Sharp Work after Dark.  
151 The Bradys in Five Points; or, The Skeleton in the Cellar.  
152 Fan Toy, the Opium Queen; or, The Bradys and the Chinese Smugglers.  
153 The Bradys' Boy Pupil; or, Sifting Strange Evidence.  
154 The Bradys in the Jaws of Death; or, Trapping the Wire Tappers.  
155 The Bradys and the Typewriter; or, The Office Boy's Secret.  
156 The Bradys and the Bandit King; or, Chasing the Mountain Thieves.  
157 The Bradys and the Drug Slaves; or, The Yellow Demons of Chinatown.  
158 The Bradys and the Anarchist Queen; or, Running Down the "Reds."  
159 The Bradys and the Hotel Crooks; or, The Mystery of Room 44.  
160 The Bradys and the Wharf Rats; or, Lively Work in the Harbor.  
161 The Bradys and the House of Mystery; or, A Dark Night's Work.  
162 The Bradys' Winning Game; or, Playing Against the Gamblers.  
163 The Bradys and the Mail Thieves; or, The Man in the Bag.  
164 The Bradys and the Boatmen; or, The Clew Found in the River.  
165 The Bradys after the Grafters; or, The Mystery in the Cab.  
166 The Bradys and the Cross-Roads Gang; or, the Great Case in Missouri.  
167 The Bradys and Miss Brown; or, The Mysterious Case in Society.  
168 The Bradys and the Factory Girl; or, The Secret of the Poisoned Envelope.  
169 The Bradys and Blonde Bill; or, The Diamond Thieves of Maiden Lane.  
170 The Bradys and the Opium Ring; or, The Clew in Chinatown.  
171 The Bradys on the Grand Circuit; or, Tracking the Light-Harness Gang.  
172 The Bradys and the Black Doctor; or, The Secret of the Old Vault.  
173 The Bradys and the Girl in Grey; or, The Queen of the Crooks.  
174 The Bradys and the Juggler; or, Out with a Variety Show.  
175 The Bradys and the Moonshiners; or, Away Down in Tennessee.  
176 The Bradys in Badtown; or, The Fight for a Gold Mine.  
177 The Bradys in the Klondike; or, Ferreting Out the Gold Thieves.  
178 The Bradys on the East Side; or, Crooked Work in the Slums.  
179 The Bradys and the "Highbinders"; or, The Hot Case in Chinatown.  
180 The Bradys and the Serpent Ring; or, The Strange Case of the Fortune-Teller.  
181 The Bradys and "Silent Sam"; or, Tracking the Deaf and Dumb Gang.  
182 The Bradys and the "Bonanza" King; or, Fighting the Fakirs in Frisco.  
183 The Bradys and the Boston Banker; or, Hustling for Millions in the Hub.  
184 The Bradys on Blizzard Island; or, Tracking the Gold Thieves of Cape Nome.  
185 The Bradys in the Black Hills; or, Their Case in North Dakota.  
186 The Bradys and "Faro Frank"; or, a Hot Case in the Gold Mines.

For sale by all newsdealers, or sent postpaid on receipt of price, 5 cents per copy, by  
**FRANK TOUSEY, Publisher,** **24 Union Square, New York.**

## IF YOU WANT ANY BACK NUMBERS

of our Libraries and cannot procure them from newsdealers, they can be obtained from this office direct. Cut out and fill in the following Order Blank and send it to us with the price of the books you want and we will send them to you by return mail. **POSTAGE STAMPS TAKEN THE SAME AS MONEY.**

FRANK TOUSEY, Publisher, 24 Union Square, New York.

DEAR SIR—Enclosed find.....cents for which please send me:

.... copies of WORK AND WIN, Nos.....  
.... " " PLUCK AND LUCK " .....  
.... " " SECRET SERVICE " .....  
.... " " THE LIBERTY BOYS OF '76, Nos.....  
.... " " Ten-Cent Hand Books, Nos.....

Name.....Street and No.....Town.....State.....



## THE STAGE.

No. 41. **THE BOYS OF NEW YORK END MEN'S JOKE BOOK.**—Containing a great variety of the latest jokes used by the most famous end men. No amateur minstrels is complete without his wonderful little book.

No. 42. **THE BOYS OF NEW YORK STUMP SPEAKER.**—Containing a varied assortment of stump speeches, Negro, Dutch and Irish. Also end men's jokes. Just the thing for home amusement and amateur shows.

No. 43. **THE BOYS OF NEW YORK MINSTREL GUIDE AND JOKE BOOK.**—Something new and very instructive. Every boy should obtain this book, as it contains full instructions for organizing an amateur minstrel troupe.

No. 65. **MULDOON'S JOKES.**—This is one of the most original joke books ever published, and it is brimful of wit and humor. It contains a large collection of songs, jokes, conundrums, etc., of Terrence Muldoon, the great wit, humorist and practical joker of the day. Every boy who can enjoy a good substantial joke should obtain a copy immediately.

No. 79. **HOW TO BECOME AN ACTOR.**—Containing complete instructions how to make up for various characters on the stage; together with the duties of the Stage Manager, Prompter, Scenic Artist and Property Man. By a prominent Stage Manager.

No. 80. **GUS WILLIAMS' JOKE BOOK.**—Containing the latest jokes, anecdotes and funny stories of this world-renowned and ever popular German comedian. Sixty-four pages; handsome colored cover containing a half-tone photo of the author.

## HOUSEKEEPING.

No. 16. **HOW TO KEEP A WINDOW GARDEN.**—Containing full instructions for constructing a window garden either in town or country, and the most approved methods for raising beautiful flowers at home. The most complete book of the kind ever published.

No. 30. **HOW TO COOK.**—One of the most instructive books on cooking ever published. It contains recipes for cooking meats, fish, game and oysters; also pies, puddings, cakes and all kinds of pastry, and a grand collection of recipes by one of our most popular cooks.

No. 37. **HOW TO KEEP HOUSE.**—It contains information for everybody, boys, girls, men and women; it will teach you how to make almost anything around the house, such as parlor ornaments, brackets, cements, Aeolian harps, and bird lime for catching birds.

## ELECTRICAL.

No. 46. **HOW TO MAKE AND USE ELECTRICITY.**—A description of the wonderful uses of electricity and electro magnetism; together with full instructions for making Electric Toys, Batteries, etc. By George Trebel, A. M., M. D. Containing over fifty illustrations.

No. 64. **HOW TO MAKE ELECTRICAL MACHINES.**—Containing full directions for making electrical machines, induction coils, dynamos, and many novel toys to be worked by electricity. By R. A. R. Bennett. Fully illustrated.

No. 67. **HOW TO DO ELECTRICAL TRICKS.**—Containing a large collection of instructive and highly amusing electrical tricks, together with illustrations. By A. Anderson.

## ENTERTAINMENT.

No. 9. **HOW TO BECOME A VENTRILOQUIST.** By Harry Kennedy. The secret given away. Every intelligent boy reading his book of instructions, by a practical professor (delighting multitudes every night with his wonderful imitations), can master the art, and create any amount of fun for himself and friends. It is the greatest book ever published, and there's millions (of fun) in it.

No. 20. **HOW TO ENTERTAIN AN EVENING PARTY.**—A very valuable little book just published. A complete compendium of games, sports, card diversions, comic recitations, etc., suitable for parlor or drawing-room entertainment. It contains more for the money than any book published.

No. 35. **HOW TO PLAY GAMES.**—A complete and useful little book, containing the rules and regulations of billiards, bagatelle, backgammon, croquet, dominoes, etc.

No. 36. **HOW TO SOLVE CONUNDRUMS.**—Containing all the leading conundrums of the day, amusing riddles, curious catches and witty sayings.

No. 52. **HOW TO PLAY CARDS.**—A complete and handy little book, giving the rules and full directions for playing Euchre, Cribbage, Casino, Forty-five, Rounce, Pedro Sancho, Draw Poker, Auction Pitch, All Fours and many other popular games of cards.

No. 66. **HOW TO DO PUZZLES.**—Containing over three hundred interesting puzzles and conundrums with key to same. A complete book. Fully illustrated. By A. Anderson.

## ETIQUETTE.

No. 13. **HOW TO DO IT; OR, BOOK OF ETIQUETTE.**—It is a great life secret, and one that every young man desires to know all about. There's happiness in it.

No. 33. **HOW TO BEHAVE.**—Containing the rules and etiquette of good society and the easiest and most approved methods of appearing to good advantage at parties, balls, the theatre, church and in the drawing-room.

## DECLAMATION.

No. 27. **HOW TO RECITE AND BOOK OF RECITATIONS.**—Containing the most popular selections in use, comprising Dutch dialect, French dialect, Yankee and Irish dialect pieces, together with many standard readings.

No. 31. **HOW TO BECOME A SPEAKER.**—Containing fourteen illustrations, giving the different positions requisite to become a good speaker, reader and elocutionist. Also containing gems from all the popular authors of prose and poetry, arranged in the most simple and concise manner possible.

No. 49. **HOW TO DEBATE.**—Giving rules for conducting debates, outlines for debates, questions for discussion, and the best sources for procuring information on the questions given.

## SOCIETY.

No. 3. **HOW TO FLIRT.**—The arts and wiles of flirtation are fully explained by this little book. Besides the various methods of handkerchief, fan, glove, parasol, window and hat flirtation, it contains a full list of the language and sentiment of flowers, which is interesting to everybody, both old and young. You cannot be happy without one.

No. 4. **HOW TO DANCE.** is the title of a new and handsome little book just issued by Frank Tousey. It contains full instructions in the art of dancing, etiquette in the ballroom and at parties, how to dress, and full directions for calling off in all popular square dances.

No. 5. **HOW TO MAKE LOVE.**—A complete guide to love, courtship and marriage, giving sensible advice, rules and etiquette to be observed, with many curious and interesting things not generally known.

No. 17. **HOW TO DRESS.**—Containing full instruction in the art of dressing and appearing well at home and abroad, giving the selections of colors, material, and how to have them made up.

No. 18. **HOW TO BECOME BEAUTIFUL.**—One of the brightest and most valuable little books ever given to the world. Everybody wishes to know how to become beautiful, both male and female. The secret is simple, and almost costless. Read this book and be convinced how to become beautiful.

## BIRDS AND ANIMALS.

No. 7. **HOW TO KEEP BIRDS.**—Handsomely illustrated and containing full instructions for the management and training of the canary, mockingbird, bobolink, blackbird, paroquet, parrot, etc.

No. 39. **HOW TO RAISE DOGS, POULTRY, PIGEONS AND RABBITS.**—A useful and instructive book. Handsomely illustrated. By Ira Drowfrow.

No. 40. **HOW TO MAKE AND SET TRAPS.**—Including hints on how to catch moles, weasels, otter, rats, squirrels and birds. Also how to cure skins. Copiously illustrated. By J. Harrington Keene.

No. 50. **HOW TO STUFF BIRDS AND ANIMALS.**—A valuable book, giving instructions in collecting, preparing, mounting and preserving birds, animals and insects.

No. 54. **HOW TO KEEP AND MANAGE PETS.**—Giving complete information as to the manner and method of raising, keeping, taming, breeding and managing all kinds of pets; also giving full instructions for making cages, etc. Fully explained by twenty-eight illustrations, making it the most complete book of the kind ever published.

## MISCELLANEOUS.

No. 8. **HOW TO BECOME A SCIENTIST.**—A useful and instructive book, giving a complete treatise on chemistry; also experiments in acoustics, mechanics, mathematics, chemistry, and directions for making fireworks, colored fires and gas balloons. This book cannot be equaled.

No. 14. **HOW TO MAKE CANDY.**—A complete handbook for making all kinds of candy, ice cream, syrups, essences, etc. etc.

No. 19. **FRANK TOUSEY'S UNITED STATES DISTANCE TABLES, POCKET COMPANION AND GUIDE.**—Giving the official distances on all the railroads of the United States and Canada. Also table of distances by water to foreign ports, hack fares in the principal cities, reports of the census, etc., etc., making it one of the most complete and handy books published.

No. 38. **HOW TO BECOME YOUR OWN DOCTOR.**—A wonderful book, containing useful and practical information in the treatment of ordinary diseases and ailments common to every family. Abounding in useful and effective recipes for general complaints.

No. 55. **HOW TO COLLECT STAMPS AND COINS.**—Containing valuable information regarding the collecting and arranging of stamps and coins. Handsomely illustrated.

No. 58. **HOW TO BE A DETECTIVE.**—By Old King Brady, the world-known detective. In which he lays down some valuable and sensible rules for beginners, and also relates some adventures and experiences of well-known detectives.

No. 60. **HOW TO BECOME A PHOTOGRAPHER.**—Containing useful information regarding the Camera and how to work it; also how to make Photographic Magic Lantern Slides and other Transparencies. Handsomely illustrated. By Captain W. De W. Abney.

No. 62. **HOW TO BECOME A WEST POINT MILITARY CADET.**—Containing full explanations how to gain admittance, course of Study, Examinations, Duties, Staff of Officers, Post Guard, Police Regulations, Fire Department, and all a boy should know to be a Cadet. Compiled and written by Lu Senarens, author of "How to Become a Naval Cadet."

No. 63. **HOW TO BECOME A NAVAL CADET.**—Complete instructions of how to gain admission to the Annapolis Naval Academy. Also containing the course of instruction, description of grounds and buildings, historical sketch, and everything a boy should know to become an officer in the United States Navy. Compiled and written by Lu Senarens, author of "How to Become a West Point Military Cadet."

PRICE 10 CENTS EACH, OR 3 FOR 25 CENTS.

Address FRANK TOUSEY, Publisher, 24 Union Square, New York.



# PLUCK AND LUCK.

CONTAINS ALL SORTS OF STORIES. EVERY STORY COMPLETE.

32 PAGES. BEAUTIFULLY COLORED COVERS. PRICE 5 CENTS.

## LATEST ISSUES:

- 134 The Drunkard's Victim. By Jno. B. Dowd.  
135 Abandoned; or, The Wolf Man of the Island. By Capt. Thos. H. Wilson.  
136 The Two Schools at Oakdale; or, The Rival Students of Corrina Lake. By Allyn Draper.  
137 The Farmer's Son; or, A Young Clerk's Downfall. A Story of Country and City Life. By Howard Austin.  
138 The Old Stone Jug; or, Wine, Cards and Ruin. By Jno. B. Dowd.  
139 Jack Wright and His Deep Sea Monitor; or, Searching for a Ton of Gold. By "Noname."  
140 The Richest Boy in the World; or, The Wonderful Adventures of a Young American. By Allyn Draper.  
141 The Haunted Lake. A Strange Story. By Allyn Draper.  
142 In the Frozen North; or, Ten Years in the Ice. By Howard Austin.  
143 Around the World on a Bicycle. A Story of Adventures in Many Lands. By Jas. C. Merritt.  
144 Young Captain Rock; or, The First of the White Boys. By Allyn Draper.  
145 A Sheet of Blotting Paper; or, The Adventures of a Young Inventor. By Richard R. Montgomery.  
146 The Diamond Island; or, Astray in a Balloon. By Allan Arnold.  
147 In the Saddle from New York to San Francisco. By Allyn Draper.  
148 The Haunted Mill on the Marsh. By Howard Austin.  
149 The Young Crusader. A True Temperance Story. By Jno. B. Dowd.  
150 The Island of Fire; or, The Fate of a Missing Ship. By Allan Arnold.  
151 The Witch Hunter's Ward; or, The Hunted Orphans of Salem. By Richard R. Montgomery.  
152 The Castaway's Kingdom; or, A Yankee Sailor Boy's Pluck. By Capt. Thos. H. Wilson.  
153 Worth a Million; or, A Boy's Fight for Justice. By Allyn Draper.  
154 The Drunkard's Warning; or, The Fruits of the Wine Cup. By Jno. B. Dowd.  
155 The Black Diver; or, Dick Sherman in the Gulf. By Allan Arnold.  
156 The Haunted Belfry; or, the Mystery of the Old Church Tower. By Howard Austin.  
157 The House with Three Windows. By Richard R. Montgomery.  
158 Three Old Men of the Sea; or, The Boys of Grey Rock Beach. By Capt. Thos. H. Wilson.  
159 3,000 Years Old; or, The Lost Gold Mine of the Hatcherpeep Hills. By Allyn Draper.  
160 Lost in the Ice. By Howard Austin.  
161 The Yellow Diamond; or, Groping in the Dark. By Jas. C. Merritt.  
162 The Land of Gold; or, Yankee Jack's Adventures in Early Australia. By Richard R. Montgomery.  
163 On the Plains with Buffalo Bill; or, Two Years in the Wild West. By an Old Scout.  
164 The Cavern of Fire; or, The Thrilling Adventures of Professor Harcastle and Jack Merton. By Allyn Draper.  
165 Water-logged; or, Lost in the Sea of Grass. By Capt. Thos. H. Wilson.  
166 Jack Wright, the Boy Inventor; or, Exploring Central Asia in His Magnetic "Hurricane." By "Noname."  
167 Lot 77; or, Sold to the Highest Bidder. By Richard R. Montgomery.  
168 The Boy Canoeist; or, 1,000 Miles in a Canoe. By Jas. C. Merritt.  
169 Captain Kidd, Jr.; or, The Treasure Hunters of Long Island. By Allan Arnold.  
170 The Red Leather Bag. A Weird Story of Land and Sea. By Howard Austin.  
171 "The Lone Star"; or, The Masked Riders of Texas. By Allyn Draper.  
172 A New York Boy out With Stanley; or, A Journey Through Africa. By Jas. C. Merritt.  
173 Afloat With Captain Nemo; or, The Mystery of Whirlpool Island. By Capt. Thos. H. Wilson.  
174 Two Boys' Trip to an Unknown Planet. By Richard R. Montgomery.  
175 The Two Diamonds; or, A Mystery of the South African Mines. By Howard Austin.  
176 Joe, the Gymnast; or, Three Years Among the Japs. By Allan Arnold.  
177 Jack Hawthorne, of No Man's Land; or, An Uncrowned King. By "Noname."  
178 Gun-Boat Dick; or, Death Before Dishonor. By Jas. C. Merritt.  
179 A Wizard of Wall Street; or, The Career of Henry Carew, Boy Banker. By H. K. Shackelford.  
180 Fifty Riders in Black; or, The Ravens of Raven Forest. By Howard Austin.  
181 The Boy Rifle Rangers; or, Kit Carson's Three Young Scouts. By An Old Scout.  
182 Where? or, Washed into an Unknown World. By "Noname."  
183 Fred Fearnought, the Boy Commander; or, The Wolves of the Sea. By Capt. Thos. H. Wilson.  
184 From Cowboy to Congressman; or, The Rise of a Young Ranchman. By H. K. Shackelford.  
185 Sam Spark, the Brave Young Fireman; or, Always the First on Hand. By Ex-Fire Chief Warden.  
186 The Poorest Boy in New York, and How He Became Rich. By N. S. Wood, the Young American Actor.  
187 Jack Wright, the Boy Inventor; or, Hunting for a Sunken Treasure. By "Noname."  
188 On Time; or, The Young Engineer Rivals. An Exciting Story of Railroading in the Northwest. By Jas. C. Merritt.  
189 Red Jacket; or, The Boys of the Farmhouse Fort. By An Old Scout.  
190 His First Glass of Wine; or, The Temptations of City Life. A True Temperance Story. By Jno. B. Dowd.  
191 The Coral City; or, The Wonderful Cruise of the Yacht Vesta. By Richard R. Montgomery.  
192 Making a Million; or, A Smart Boy's Career in Wall Street. By H. K. Shackelford.  
193 Jack Wright and His Electric Turtle; or, Chasing the Pirates of the Spanish Main. By "Noname."  
194 Flyer Dave, the Boy Jockey; or, Riding the Winner. By Allyn Draper.  
195 The Twenty Gray Wolves; or, Fighting A Crafty King. By Howard Austin.  
196 The Palace of Gold; or, The Secret of a Lost Race. By Richard R. Montgomery.  
197 Jack Wright's Submarine Catamaran; or, The Phantom Ship of the Yellow Sea. By "Noname."  
198 A Monte Cristo at 18; or, From Slave to Avenger. By Allyn Draper.  
199 The Floating Gold Mine; or, Adrift in an Unknown Sea. By Capt. Thos. H. Wilson.  
200 Moll Pitcher's Boy; or, As Brave as His Mother. By Gen'l Jas. A. Gordon.  
201 "We." By Richard R. Montgomery.  
202 Jack Wright and His Ocean Racer; or, Around the World in 20 Days. By "Noname."  
203 The Boy Pioneers; or, Tracking an Indian Treasure. By Allyn Draper.  
204 Still Alarm Sam, the Daring Boy Fireman; or, Sure to Be On Hand. By Ex-Fire Chief Warden.  
205 Lost on the Ocean; or, Ben Bluff's Last Voyage. By Capt. Thos. H. Wilson.  
206 Jack Wright and His Electric Canoe; or, Working in the Revenue Service. By "Noname."  
207 Give Him a Chance; or, How Tom Curtis Won His Way. By Howard Austin.  
208 Jack and I; or, The Secrets of King Pharaoh's Caves. By Richard R. Montgomery.  
209 Buried 5,000 Years; or, The Treasure of the Aztecs. By Allyn Draper.  
210 Jack Wright's Air and Water Cutter; or, Wonderful Adventures on the Wing and Afloat. By "Noname."  
211 The Broken Bottle; or, A Jolly Good Fellow. A True Temperance Story. By Jno. B. Dowd.  
212 Slippery Ben; or, The Boy Spy of the Revolution. By Gen'l Jas. A. Gordon.  
213 Young Davy Crockett; or, The Hero of Silver Gulch. By An Old Scout.  
214 Jack Wright and His Magnetic Motor; or, The Golden City of the Sierras. By "Noname."  
215 Little Mac, The Boy Engineer; or, Bound To Do His Best. By Jas. C. Merritt.  
216 The Boy Money King; or, Working in Wall Street. A Story of a Smart New York Boy. By H. K. Shackelford.  
217 "I." A Story of Strange Adventure. By Richard R. Montgomery.  
218 Jack Wright, The Boy Inventor, and His Under-Water Ironclad; or, The Treasure of the Sandy Sea. By "Noname."

For sale by all newsdealers, or sent postpaid on receipt of price, 5 cents per copy, by  
**FRANK TOUSEY, Publisher,** **24 Union Square, New York.**

## IF YOU WANT ANY BACK NUMBERS

of our Libraries and cannot procure them from newsdealers, they can be obtained from this office direct. Cut out and fill in the following Order Blank and send it to us with the price of the books you want and we will send them to you by return mail. **POSTAGE STAMPS TAKEN THE SAME AS MONEY.**

FRANK TOUSEY, Publisher, 24 Union Square, New York.

1901

DEAR SIR—Enclosed find.....cents for which please send me:

... copies of WORK AND WIN, Nos.....

... " " PLUCK AND LUCK " .....

... " " SECRET SERVICE " .....

... " " THE LIBERTY BOYS OF '76, Nos.....

... " " Ten-Cent Hand Books, Nos.....

Name.....Street and No.....Town.....State.....